Db2 11 for z/OS

Messages



GC19-4062-10

Notes

Before using this information and the product it supports, be sure to read the general information under "Notices" at the end of this information.

Subsequent editions of this PDF will not be delivered in IBM Publications Center. Always download the latest edition from PDF format manuals for Db2 11 for z/OS (Db2 Home).

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This edition applies to Db2® 11 for z/OS® (product number 5615-DB2), Db2 11 for z/OS Value Unit Edition (product number 5697-P43), and to any subsequent releases until otherwise indicated in new editions. Make sure you are using the correct edition for the level of the product.

Specific changes are indicated by a vertical bar to the left of a change. A vertical bar to the left of a figure caption indicates that the figure has changed. Editorial changes that have no technical significance are not noted.

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About this information

This information helps you to understand the messages that you could receive while working with Db2 11 for z/OS (Db2 for z/OS). The topics provide detailed descriptions of the messages that are issued by Db2, with explanations and user responses for the situations that are associated with these messages.

Unless the message is issued by a subcomponent operating outside the Db2 environment, messages are preceded by a *command prefix* that is defined during system installation. The command prefix is not shown in the message text.

Throughout this information, "Db2" means "Db2 11 for z/OS". References to other Db2 products use complete names or specific abbreviations.

Important: To find the most up to date content for Db2 11 for z/OS, always use IBM® Knowledge Center or download the latest PDF file from PDF format manuals for Db2 11 for z/OS (Db2 Home).

This information assumes that Db2 11 is running in new-function mode, and that your application is running with the application compatibility value of 'V11R1'.

Availability of new function in Db2 11

The behavior of data definition statements such as CREATE, ALTER, and DROP, which embed data manipulation SQL statements that contain new capabilities, depends on the application compatibility value that is in effect for the application. An application compatibility value of 'V11R1' must be in effect for applications to use new capability in embedded statements such as SELECT, INSERT, UPDATE, DELETE, MERGE, CALL, and SET *assignment-statement*. Otherwise, an application compatibility value of 'V10R1' can be used for data definition statements.

Generally, new SQL capabilities, including changes to existing language elements, functions, data manipulation statements, and limits, are available only in new-function mode with applications set to an application compatibility value of 'V11R1'.

Optimization and virtual storage enhancements are available in conversion mode unless stated otherwise.

SQL statements can continue to run with the same expected behavior as in DB2® 10 new-function mode with an application compatibility value of 'V10R1'.

Who should read this information

Db2 Messages lists messages issued by Db2, with explanations and suggested responses. This information is intended for users and system programmers who might encounter Db2 messages.

Db2 Utilities Suite for z/OS

Important: In Db2 11, the Db2 Utilities Suite for z/OS is available as an optional product. You must separately order and purchase a license to such utilities, and discussion of those utility functions in this publication is not intended to otherwise imply that you have a license to them.

Db2 11 utilities can use the DFSORT program regardless of whether you purchased a license for DFSORT on your system. For more information, see the following informational APARs:

- II14047
- II14213
- II13495

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Db2 utilities can use IBM Db2 Sort for z/OS (5655-W42) as an alternative to DFSORT for utility SORT and MERGE functions. Use of Db2 Sort for z/OS requires the purchase of a Db2 Sort for z/OS license. For more information about Db2 Sort for z/OS, see Db2 Sort for z/OS.

Related concepts

Db2 utilities packaging (Db2 Utilities)

Terminology and citations

When referring to a Db2 product other than Db2 for z/OS, this information uses the product's full name to avoid ambiguity.

About the Db2 brand change: IBM has re-branded DB2 to Db2, and Db2 for z/OS is now the name of the offering previously know as "DB2 for z/OS". During and after implementation of this change, you might sometimes still see references to the original names, such as "DB2 for z/OS" and "DB2", in different IBM web pages and documents. However, assume that these refer to the same "Db2 for z/OS" product when the PID, Entitlement Entity, version, modification, and release information match. For more information, see Revised naming for IBM Db2 family products on IBM z/OS platform.

The following terms are used as indicated:

Db2
Represents either the Db2 licensed program or a particular Db2 subsystem.

Tivoli® OMEGAMON® XE for Db2 Performance Expert on z/OS
Refers to any of the following products:

- IBM Tivoli OMEGAMON XE for Db2 Performance Expert on z/OS
- IBM Db2 Performance Monitor on z/OS
- IBM Db2 Performance Expert for Multiplatforms and Workgroups
- IBM Db2 Buffer Pool Analyzer for z/OS

C, C++, and C language
Represent the C or C++ programming language.

CICS®
Represents CICS Transaction Server for z/OS.

IMS
Represents the IMS Database Manager or IMS Transaction Manager.

MVS™
Represents the MVS element of the z/OS operating system, which is equivalent to the Base Control Program (BCP) component of the z/OS operating system.

RACF®
Represents the functions that are provided by the RACF component of the z/OS Security Server.

Accessibility features for Db2 11 for z/OS

Accessibility features help a user who has a physical disability, such as restricted mobility or limited vision, to use information technology products successfully.

Accessibility features

The following list includes the major accessibility features in z/OS products, including Db2 11 for z/OS. These features support:

- Keyboard-only operation.
- Interfaces that are commonly used by screen readers and screen magnifiers.
- Customization of display attributes such as color, contrast, and font size

Tip: The IBM Knowledge Center (which includes information for Db2 for z/OS) and its related publications are accessibility-enabled for the IBM Home Page Reader. You can operate all features using the keyboard instead of the mouse.

Keyboard navigation

For information about navigating the Db2 for z/OS ISPF panels using TSO/E or ISPF, refer to the *z/OS TSO/E Primer*, the *z/OS TSO/E User's Guide*, and the *z/OS ISPF User's Guide*. These guides describe how to navigate each interface, including the use of keyboard shortcuts or function keys (PF keys). Each guide includes the default settings for the PF keys and explains how to modify their functions.

Related accessibility information

IBM and accessibility

See the *IBM Accessibility Center* at http://www.ibm.com/able for more information about the commitment that IBM has to accessibility.

How to send your comments

Your feedback helps IBM to provide quality information. Please send any comments that you have about this book or other Db2 for z/OS documentation.

Send your comments by email to db2zinfo@us.ibm.com and include the name of the product, the version number of the product, and the number of the book. If you are commenting on specific text, please list the location of the text (for example, a chapter and section title or a help topic title).

How to interpret message numbers

Db2 issues messages to communicate system status and processing results. Messages are identifiable by unique message numbers. The format of a message number can help you understand what the message applies to and, in some cases, its severity.

Messages are identifiable by unique message numbers, which are eight to ten characters long. Message identifiers have the following format:

```
DSNB209I
```

DSN
The first three characters are DSN, which is the Db2 component prefix.

B
The fourth character is the *subcomponent identifier*, which identifies the subcomponent of Db2 that issued the message. Each subcomponent has an associated *hexadecimal identifier* (hex ID), which is the hexadecimal representation of the subcomponent identifier. In this example, B identifies the Db2 buffer manager.

209
The *numeric identifier* is three to five characters long and begins at the fifth character in the message. The numeric identifier is unique within the subcomponent.

I
The last character of the message identifier is the *message type code*. Most Db2 messages use the I type code, regardless of severity or whether an action is required.

Some older messages use other type codes. However, the type code does not necessarily reflect the severity of these messages. Some messages use the following other type codes:

A
Action is required immediately. The associated task does not continue until the requested action is taken.

E

Action is required eventually. However, the associated task continues. All RC=8 error messages that are not host related (SOFT errors) have the E changed to a W in precompiler output when SQL(ALL) is in effect. All RC=8 errors (HARD errors) look the same as they have in the past.

Messages in some sub-components are associated with particular return codes. The return codes can vary by subcomponent. The introduction to each set of messages describes the return codes used for that subcomponent.

Messages are organized by subcomponent identifier and numeric identifier, and sorted numerically within each group.

Related information

Format of z/OS MVS system messages

Subcomponent identifiers

The numbers that are assigned to messages and reason codes in Db2 are associated with certain Db2 subcomponents or functional areas.

The following table lists the Db2 subcomponents and functional areas and shows the identifiers that are associated with each one.

Table 1. Subcomponent identifiers used in messages and reason codes

Subcomponent or functional area	Associated identifier for messages	Associated identifier for reason codes
Call attachment facility	A	X'C1'
Buffer manager	B	X'C2'
TSO attachment facility	E	X'C5'
Message generator	F	X'C6'
Database descriptor manager	G	n/a
Precompiler, DSNH CLIST	H	X'C8'
Data manager	I	X'C9'
Recovery log manager	J	X'D1'
Distributed data facility	L	X'D3'
IMS attachment facility	M	X'D4'
XML manager	n/a	X'D5'
Data space manager	P	X'D7'
MQListener	Q	n/a
Recovery manager	R	X'D9'
Storage manager	S	X'E2'
Service controller, install	T	X'E3'
Utilities	U	X'E4'
Agent services manager	V	X'E5'
Instrumentation facility	W	X'E6'
Relational data system	X	X'E7'
Initialization procedures	Y	X'E8'

Table 1. Subcomponent identifiers used in messages and reason codes (continued)

Subcomponent or functional area	Associated identifier for messages	Associated identifier for reason codes
System parameter manager	Z	X'E9'
Service facilities	1	X'F1'
Subsystem support subcomponent	3	X'F3'
Group manager	7	X'F7'
Db2 Accessories Suite for z/OS	5	n/a
Sample applications	8	X'F8'
General command processor	9	X'F9'

Messages with DSNC and DSN2 identifiers and codes in the X'C3®' range were previously used to display CICS messages. For information about CICS messages, see the information in the Search the CICS Library..

How to find additional information about messages

When you are working with Db2, you might encounter messages issued by other IBM products, such as IMS, CICS, or z/OS. Information about messages issued by these and other IBM products is available in IBM Knowledge Center.

CICS
Information for multiple versions of CICS are available as part of the CICS library. Search the CICS Library..

IMS
IMS messages are available in IMS messages and codes.

IRLM
Messages and codes related to the IRLM, which were previously part of *Db2 Codes*, are now provided in *IRLM Messages and Codes for IMS and Db2 for z/OS*. IRLM messages have the prefix `dxr`.

- IRLM return and reason codes (IRLM)
- IRLM abend codes (IRLM)
- DXR messages (IRLM)

z/OS
Information for multiple versions of z/OS is available as part of the z/OS library. Search the z/OS library..

Chapter 1. DSNA messages

Message identifiers that begin with DSNA communicate information about the call attachment facility (CAF).

DSNA messages fall into two categories:

- Messages that are written to a trace file. These are seen only if the trace is turned on (that is, ddname DSNTRACE was allocated to SYSOUT or the TSO terminal).
- Messages that are returned by a Db2 stored procedure. These are seen only as a parameter that is returned by the stored procedure.

DSNA messages use common elements and share the same basic structure:

- Message number (DSNA*nnna*).
- The name of the CSECT responsible for writing the message.
- TCB address of the task currently executing.
- A series of tokens and token-explanations unique to each message.

The intent of these messages is to aid IBM Support. They contain information that might not be meaningful except to IBM.

DSNA002E **DSNACA00 TCB=address SYSTEM ERROR - FOUND UNEXPECTED THREAD**

Explanation

The Db2 call attachment facility control block, the CAB, indicated that a thread was present when none should have been present. This is a CAF system error.

System action

This message immediately precedes an 04E abend, with reason code 00C10002.

System programmer response

Collect a SYSUDUMP and DSNTRACE trace stream.

Programmer response

Refer the problem to your system programmer.

Problem determination

Contact IBM Support.

DSNA201E **DSNACA00 TCB=*address* CANNOT USE 'CONNECT', ALREADY CONNECTED TO DB2**

Explanation

A CONNECT request was received but a connection to Db2 already existed for the TCB identified by 'address' in the message. This is a CAF error (application program error). The message is accompanied by return code (R15) 200 and code (R0) 00C10201.

System action

No new connection is made to Db2 and an error return and reason code are issued. The Db2 call attachment facility is ready for more input.

System programmer response

Refer the problem to the programmer using the Db2 call attachment facility.

Programmer response

You must DISCONNECT the previous connection before you can re-CONNECT. Correct the logic in your code.

Problem determination

See a DSNTRACE trace stream to understand the context of this message.

DSNA202E **DSNACA00 TCB=address CANNOT USE 'OPEN', PRIOR OPEN OR SQL ALREADY CONNECTED APPLICATION TO DB2**

Explanation

An OPEN request was received but a Db2 thread had already been created for the specified TCB. This is a user error. The message is accompanied by return code (R15) 200 and code (R0) 00C10202.

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System action

No new Db2 thread is created and an error return and reason code are issued. The Db2 call attachment facility is ready for more input.

System programmer response

Refer the problem to the programmer using the Db2 call attachment facility.

Programmer response

Your application program had already (explicitly or implicitly) established an OPEN level connection to Db2. You cannot do this again until the original OPEN is terminated. 'Explicit' OPENs occur when an application issues the call attachment facility OPEN request. 'Implicit' OPENs occur when an application issues SQL statements before a Db2 connection was established. Correct the logic in your application program.

Problem determination

See a DSNTRACE trace stream to understand the context of this message.

DSNA203E DSNACA00 TCB=address CANNOT USE 'CLOSE', THERE WAS NO 'OPEN' IN EFFECT

Explanation

A CLOSE request was received but no OPEN level connection (implicit or explicit) existed for this task. This is a user error. The message is accompanied by return code (R15) 200 and code (R0) 00C10203.

System action

No CLOSE is performed. The Db2 call attachment facility is ready for more input.

System programmer response

Refer the problem to the programmer using the Db2 call attachment facility.

Programmer response

Correct the logic in your application. Do not issue CLOSE unless an explicit OPEN has been performed. 'Explicit' OPENs occur when an application issues the call attachment facility OPEN request.

Problem determination

See a DSNTRACE trace stream to understand the context of this message.

DSNA204E DSNACA00 TCB=address CANNOT USE 'DISCONNECT', THERE WAS NO 'CONNECT' IN EFFECT

Explanation

A DISCONNECT request was received but no Db2 connection had been established. This is a user error. The message is accompanied by return code (R15) 200 and code (R0) 00C10204.

System action

No DISCONNECT has been performed. The Db2 call attachment facility is ready for more input.

System programmer response

Refer the problem to the programmer using the Db2 call attachment facility.

Programmer response

Correct the logic in your application. Do not issue DISCONNECT unless a CONNECT has been performed.

Problem determination

See a DSNTRACE trace stream to understand the context of this message.

DSNA205E DSNACA00 TCB=address CANNOT USE 'TRANSLATE', THERE WAS NO CONNECTION TO DB2 OR NOTHING TO TRANSLATE

Explanation

A TRANSLATE request was received but no data was available for translation. You must have valid Db2 call attachment facility control structures before you can make a TRANSLATE request. Control structures are built when you issue explicit or implicit connection requests. This is a user error. The message is accompanied by return code (R15) 200 and code (R0) 00C10205.

System action

No TRANSLATE is performed. The Db2 call attachment facility is ready for more input.

System programmer response

Refer the problem to the programmer using the Db2 call attachment facility.

Programmer response

Correct the logic in your application. Do not issue TRANSLATE unless a Db2 connection has been attempted.

Problem determination

See a DSNTRACE trace stream to understand the context of this message.

DSNA206E **DSNACA00 TCB=address WRONG NUMBER OF PARMS OR VL BIT OFF**

Explanation

An erroneous Db2 call attachment facility request was received. The request had too many or too few parameters and could not be processed. The message is accompanied by return code (R15) 200 and code (R0) 00C10206.

System action

The previous request was not processed. The Db2 call attachment facility is ready for more input.

System programmer response

Refer the problem to the programmer using the Db2 call attachment facility.

Programmer response

Correct the logic in your application. Be sure that any parameter list passed to the Db2 call attachment facility has the correct number of parameters for the individual call, and that the high order (VL) bit is turned on to end the parameter list.

Problem determination

See a DSNTRACE trace stream to understand the context of this message.

DSNA207E **DSNACA00 TCB=*tcb-address* DID NOT RECOGNIZE ACTION PARAMETER - *parameter-name***

Explanation

An unrecognized action request type or parameter was received by the Db2 call attachment facility and could not be processed. The allowable action request types are CONNECT, OPEN, CLOSE, DISCONNECT, and TRANSLATE. This message is accompanied by return code (R15) 200 and code (R0) 00C10207.

System action

Control returns to the caller. Your request was not processed. The Db2 call attachment facility is ready for more input.

System programmer response

Refer the problem to the programmer using the Db2 call attachment facility.

Programmer response

Correct the logic in your application. Check the spelling of the action parameter type or keyword on the previous request passed to the Db2 call attachment facility. The action parameter type you passed is listed in the parm field of the DSNA800I trace message. If the error is not the action parameter, the parameter in error is listed in the parm field of this message.

Problem determination

See a DSNTRACE trace stream to understand the context of this message.

Related tasks

Invoking the call attachment facility (Db2 Application programming and SQL)

Related reference

CAF return codes and reason codes (Db2 Application programming and SQL)

Related information

00C10207 (Db2 Codes)

DSNA208E **DSNACA00 TCB=address CANNOT HAVE 2 SSIDS (ssid1 AND ssid2) FROM 1 TCB**

Explanation

An OPEN request was received specifying a different subsystem identifier (ssid2) than the previous CONNECT request (ssid1). Your task can only be connected to a single Db2 subsystem. The message is accompanied by return code (R15) 200 and code (R0) 00C10208.

System action

Control returns to the caller. Your request was not processed. The Db2 call attachment facility is ready for more input.

System programmer response

Refer the problem to the programmer using the Db2 call attachment facility.

Programmer response

Specify the correct Db2 subsystem identifier on both the OPEN and CONNECT requests.

Problem determination

See a DSNTRACE trace stream to understand the context of this message.

DSNA209E DSNACA00 A STORED PROCEDURE ISSUED AN EXPLICIT CALL TO DSNALI

Explanation

A stored procedure issued an explicit call to DSNALI. This is not allowed. Return code 200 in register 15 and code 00C10209 in register 0 accompany this message.

System action

Control returns to the caller. The request was not processed. The Db2 call attachment facility is ready for more input.

System programmer response

Refer the problem to the programmer using the Db2 call attachment facility.

Programmer response

Remove explicit calls to DSNALI from the application program.

Problem determination

See a DSNTRACE trace job stream to understand the context of this message.

DSNA301I THE VALUE *parm-value* FOR PARAMETER *parm-name* IS NOT VALID

Explanation

The stored procedure DSNACICS could not run because one of the input parameters contains an incorrect value.

System action

The stored procedure DSNACICS terminates without calling the CICS transaction.

System programmer response

Ensure that the user exit DSNACICX sets the parameter to a valid value.

Programmer response

Correct the input parameter value specified on the SQL CALL statement.

Severity

12

DSNA302I THE REQUIRED INPUT PARAMETER *parm-name* CONTAINS NULLS

Explanation

The stored procedure DSNACICS could not run because one or more of the required input parameters contains a null value.

System action

The stored procedure DSNACICS terminates without calling the CICS transaction.

System programmer response

Ensure that the user exit DSNACICX sets the parameter to a non-null value.

Programmer response

Correct the input parameter value in the SQL CALL statement, or ensure that the user exit DSNACICX sets the parameter to a non-null value.

Severity

12

DSNA303I THE PARAMETER NETNAME WAS NOT SPECIFIED WHEN THE CONNECT TYPE OF SPECIFIC WAS SPECIFIED

Explanation

The input parameter NETNAME must contain a non-null value when the CONNECT TYPE parameter is set to SPECIFIC.

System action

The stored procedure DSNACICS terminates without calling the CICS transaction.

System programmer response

Ensure that the user exit DSNACICX sets the parameter to a non-null value.

Programmer response

Correct the input parameter value in the SQL CALL statement, or ensure the user exit DSNACICX sets the parameter to a non-null value.

Severity

12

DSNA304I **THE USER EXIT DSNACICX RETURNED RETURN CODE = X'hhhhhhhh' AND THE FOLLOWING ERROR MESSAGE:**

Explanation

The user exit DSNACICX returned a non-zero return code and a message to stored procedure DSNACICS. The message that DSNACICX returns immediately follows message DSNA304I.

System action

The stored procedure DSNACICS terminates without calling the CICS transaction.

System programmer response

Correct the cause of the error message that the user exit generated.

Programmer response

Contact the system programmer.

Severity

12

DSNA305I **THE CICS EXCI *func* REQUEST FAILED. CICS RESPONSE CODE = X'hhhh' CICS REASON CODE = X'hhhhhhhh'**

Explanation

DSNACICS uses the CICS EXCI Call interface to request the execution of a CICS server program. CICS EXCI interface call *func* resulted in an unexpected CICS response code and reason code. Possible values of *func* are:

Initialize_User
Initializes the EXCI user environment.

Allocate_Pipe
Allocates a session to a CICS region.

Open_Pipe
Connects an allocated pipe to a receive session of the CICS region.

DPL_Request
Issues a request to execute the CICS server program.

Close_Pipe
Disconnects an open pipe from a CICS region.

Deallocate_Pipe
Deallocates a pipe from a CICS region.

The failure can occur because the EXCI interface is not properly enabled for the CICS subsystem. For explanations of the CICS response code and reason code, see *CICS Transaction Server for z/OS External Interfaces Guide*.

System action

The stored procedure DSNACICS terminates without calling the CICS transaction.

System programmer response

Ensure that the EXCI interface is enabled to the CICS region that the stored procedure calls. If you suspect an error in the Db2 stored procedure, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Add a DSNDUMP DD statement to the JCL startup procedure for the stored procedure address space in which DSNACICS runs. Then rerun the application that calls DSNACICS. This causes Db2 to generate an SVC dump whenever it issues an error message for DSNACICS.

If you suspect an error in the Db2 stored procedure, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- CICS trace listing.

Programmer response

Contact the system programmer.

Severity

12

DSNA306I **THE CICS SERVER PROGRAM *program* ABENDED. CICS ABEND CODE=C'cccc'**

Explanation

The CICS server program that DSNACICS called abnormally terminated. CICS returns a four-character abend code to indicate the error. These error codes are described in *CICS Transaction Server for z/OS Problem Determination Guide*.

System action

Stored procedure DSNACICS processes the next request. CICS does a backout to the last syncpoint and forces the SYNCONRETURN option.

System programmer response

Correct the cause of the error in the server program. Ensure that the mirror transaction is still enabled after this error. The mirror transaction must be enabled so that subsequent requests to run a server program are accepted.

Programmer response

Correct the error in the server program.

Severity

12

DSNA307I **z/OS *token-service* REQUEST FAILED. SYSTEM RETURN CODE=X'hhhh'**

Explanation

DSNACICS uses the z/OS token services to save task-level information. The z/OS service returned an unexpected return code.

token-service is the token service function that DSNACICS requested. Possible values are:

Create_token
Create a token using the IEANTCR service.

Retrieve_token
Retrieve a token using the IEANTRT service.

See the description of IEANTCR or IEANTRT in *z/OS MVS Programming: Assembler Services Reference, Volumes 1 and 2* for a full description of the return code.

System action

Stored procedure DSNACICS processes the next request.

System programmer response

Add a DSNDUMP DD statement to the JCL startup procedure for the stored procedure address space in which DSNACICS runs. Then rerun the application that calls DSNACICS. This causes Db2 to generate an SVC dump whenever it issues an error message for DSNACICS.

If you suspect an error in the Db2 stored procedure, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- CICS trace listing.

Programmer response

Contact the system programmer.

Severity

12

DSNA308I **THE CICS EXCI DPL_REQUEST REQUEST FAILED. CICS RESPONSE CODE=0. DPL RETAREA CONTAINS FIELD1=X'hhhhhhhh', FIELD2=X'hhhhhhhh', FIELD3=C'cccc'**

Explanation

DSNACICS uses the CICS EXCI Call interface to request the execution of a CICS server program. The DPL_REQUEST command returned an unexpected value in the DPL_RETAREA. See *CICS Transaction Server for z/OS External Interfaces Guide* and *CICS Application Programming Guide* for a full description of the meanings of FIELD1, FIELD2, and FIELD3.

System action

Stored procedure DSNACICS processes the next request.

System programmer response

Add a DSNDUMP DD statement to the JCL startup procedure for the stored procedure address space in which DSNACICS runs. Then rerun the application that calls DSNACICS. This causes Db2 to generate an SVC dump whenever it issues an error message for DSNACICS.

If you suspect an error in the Db2 stored procedure, you might need to report the problem. For information

about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- CICS trace listing.

Programmer response

Correct any errors in the server program. Contact the system programmer.

Severity

12

DSNA309I UNABLE TO LOAD USER EXIT DSNACICX. SYSTEM REASON CODE=X'hhhh' SYSTEM COMPLETION CODE=X'hhhh'

Explanation

DSNACICS was unable to load the user exit routine DSNACICX.

System action

The stored procedure DSNACICS does not call the CICS transaction. DSNACICS processes the next request.

System programmer response

Ensure that the STEPLIB statement in the startup procedure for the stored procedure address space specifies the library that contains DSNACICX. A default user exit is shipped in the SDSNLOAD Db2 library.

Add a DSNDUMP DD statement to the JCL startup procedure for the stored procedure address space in which DSNACICS runs. Then rerun the application that calls DSNACICS. This causes Db2 to generate an SVC dump whenever it issues an error message for DSNACICS.

If you suspect an error in the Db2 stored procedure, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- CICS trace listing.

Programmer response

Contact the system programmer.

Severity

12

DSNA310I STORED PROCEDURE TASK CANCELLED BY OPERATOR

Explanation

The task that called the DSNACICS stored procedure was canceled by the operator.

System action

DSNACICS terminates immediately. The CICS server program might have been called.

System programmer response

Determine why the operator canceled the stored procedure task.

Programmer response

Contact the system programmer.

Severity

12

DSNA311I DSNACICS ABNORMALLY TERMINATED

Explanation

The task that called the DSNACICS stored procedure abnormally terminated.

System action

DSNACICS terminates immediately. The CICS server program might have been called. An SVC dump or a SYSMDUMP is generated for this error. If a CICS service encountered an error, a SYSMDUMP might be generated. For an abend in the stored procedure, an SVC dump is generated.

System programmer response

Review the JES messages for the stored procedure address space in which DSNACICS runs. Look for CICS or system messages that describe the source of the problem.

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- CICS trace listing.

Programmer response

Contact the system programmer.

Severity

12

DSNA312I USER EXIT DSNACICX ABNORMALLY TERMINATED

Explanation

User exit program DSNACICX abnormally terminated.

System action

DSNACICS terminates immediately. The CICS server program is not called. An SVC dump is generated for this error.

System programmer response

Determine why the user exit abended. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).. Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- CICS trace listing.

Programmer response

Contact the system programmer.

Severity

12

DSNA313I DSNACICS TERMINATED BY at DB2 CANCEL THREAD COMMAND

Explanation

The stored procedure DSNACICS terminated because the operator issued the at Db2 CANCEL THREAD command.

System action

DSNACICS terminates immediately. The CICS server program might have been called.

System programmer response

Determine why the operator issued the at Db2 CANCEL THREAD command.

Programmer response

Contact the system programmer.

Severity

12

DSNA314I UNABLE TO LOAD CICS STUB ROUTINE DFHXCSTB. SYSTEM REASON CODE=X'hhhh' SYSTEM COMPLETION CODE=X'hhhh'

Explanation

DSNACICS was unable to load the CICS stub routine DFHXCSTB.

System action

The stored procedure DSNACICS does not call the CICS transaction. DSNACICS processes the next request.

System programmer response

Ensure that the STEPLIB statement in the startup procedure for the stored procedure address space specifies the CICS library that contains DFHXCSTB. DFHXCSTB is in the CICS EXCI library (SDFHEXCI). This library must be APF authorized.

Add a DSNDUMP DD statement to the JCL startup procedure for the stored procedure address space in which DSNACICS runs. Then rerun the application that calls DSNACICS. This causes Db2 to generate an SVC dump whenever it issues an error message for DSNACICS.

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data). Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- CICS trace listing.

Programmer response

Contact the system programmer.

Severity

12

DSNA315I ***stored-procedure*** **FUNCTION** ***func-name*** **HAS COMPLETED SUCCESSFULLY.**

Explanation

The stored procedure, *stored-procedure*, executed successfully.

System action

None.

Programmer response

None.

DSNA316I ***stored-procedure*** **INPUT PARAMETER ERROR. CALLER MUST PROVIDE INPUT FOR PARAMETER** ***parm-name*** **WITH FUNCTION** ***func-name*****.**

Explanation

A value for parameter *parm-name* is required for function *func-name*.

System action

The execution of the stored procedure, *stored-procedure*, terminated before invoking IMS.

Programmer response

Provide an appropriate value for the parameter, and re-run the function.

DSNA317I ***stored-procedure*** **ERROR IN** ***otmaci-api*** **API. RC=*return-code*, RSN1=*reason-code1*, RSN2=*reason-code2*, RSN3=*reason-code3*, RSN4=*reason-code4*.**

Explanation

OTMA Callable Interface API *otmaci-api* encountered an error.

System action

The execution of the stored procedure, *stored-procedure*, terminated before invoking IMS.

Programmer response

Refer to the *IMS OTMA Guide and Reference* for explanations of the return and reason codes.

DSNA318I ***stored-procedure*** **ERROR IN RRS CTXRCC API. RC=*return-code***

Explanation

An error was encountered in RRS when processing the two-phase commit.

System action

The execution of the stored procedure, *stored-procedure*, terminated before invoking IMS.

Programmer response

Refer to the *MVS Programming Resource Recovery* manual for an explanation of the return code.

DSNA319I ***stored-procedure*** **RECEIVED UNKNOWN FUNCTION** ***func-name***

Explanation

The stored procedure, *stored-procedure*, received an unknown function name in parameter 1 of the stored procedure call.

System action

The stored procedure terminated before invoking IMS.

Programmer response

Specify a function name known to the stored procedure in parameter 1.

DSNA320I **DSNAIMS ERROR IN CTXSWCH DURING THE SWITCH AWAY FROM PRIVATE CONTEXT. RC=*return-code***

Explanation

An error was encountered in CTXSWCH API during the switch away from private context of DSNAIMS.

System action

DSNAIMS is terminated after executing CTXSWCH.

Programmer response

Contact IBM service for the return code.

DSNA321I **DSNAIMS ERROR IN CTXSWCH DURING THE SWITCH TO PRIVATE CONTEXT. RC=*return-code***

Explanation

An error was encountered in CTXSWCH API during the switch to private context of DSNAIMS.

System action

DSNAIMS is terminated after executing CTXSWCH.

Programmer response

Contact IBM service for the return code.

DSNA601I ***csect-name* THE PARAMETER *parm-name* IS NOT VALID, INVALID REASON CODE = *reason-invalid***

Explanation

The parameter specified in the message is not valid.

parm-name
The name of the parameter that contained an invalid value.

reason-invalid
The reason that the *parm-name* parameter value is not valid:

1. The value is not acceptable.
2. The value is not unique.
3. The value is null.
4. The value is blank.
5. The value is not null.
6. The length of the value is not valid.
7. The *parm-name* parameter is not known.
8. The *parm-name* parameter is missing.

The specified parameter is not valid for the indicated reason:

The *csect-name* in the message identifies the CSECT that issued the message.

System action

The stored procedure, started task, or batch program terminates.

Programmer response

Correct the input parameter value specified on the SQL CALL statement or on the start command.

Severity

12 (severe)

DSNA602I ***csect-name* INCORRECT DSN SUBCOMMAND *subcommand* RECEIVED**

Explanation

The DSN subcommand specified is not an acceptable value. The only supported DSN subcommands are: BIND, REBIND and FREE.

System action

Processing terminates.

Programmer response

Correct the invalid DSN subcommand.

Severity

12 (severe)

DSNA603I ***csect-name* THE COLUMN *column-name* IN TABLE *table-name* IS NOT VALID. *row-identifier=row-id*. INVALID REASON CODE= *reason-code***

Explanation

An invalid value was supplied for *column-name* column.

csect-name
The name of the control section that issued the message.

column-name
The name of the column.

table-name
The name of the table.

row-identifier=row-id
Indicates the row that contains the invalid column.

reason-code
A numeric value that indicates that reason that the specified column is not valid:

1
The value is not an acceptable value.

2
The length of the value is invalid.

3
The value is null.

System action

Processing terminates.

User response

Specify a valid value for the specified column.

Severity

12 (severe error)

DSNA604I ***csect-name*** **DUPLICATE OBJECT-ID** ***object-id*** **IN TABLE** ***table-name***

Explanation

A duplicate value was supplied for the object ID column in *table-name* table. The duplicate value was in the row with object ID *object-id* .

System action

Processing terminates.

User response

Specify a unique object-id for the object ID column in the named table.

Severity

12 (severe)

DSNA605I ***csect-name*** **THERE ARE** ***object-num*** **OBJECTS NOT FOUND IN THE DB2 CATALOG**

Explanation

There are *object-num* objects not found in the Db2 catalog.

System action

Objects not found in the Db2 catalog are not processed.

User response

Verify the name of the objects that were not processed.

Severity

12 (severe)

DSNA606I ***csect-name*** **UNABLE TO** ***data-set-action*** **DATA SET DSNAME=*dsname*, MVS *macname* MACRO FAILED WITH RETURN CODE=*xx***

Explanation

An MVS non-VSAM macro returned an unexpected return code when it was invoked.

The *csect-name* in the message identifies the CSECT that issued the message.

System action

Processing of the specified data set terminates.

Programmer response

Specify valid credentials in the SQL CALL statement. If the problem persists, ask your security administrator to check the security configuration for the specified user.

Refer to *z/OS DFSMS: Macro Instructions for Data Sets* for more information on the MVS RETURN CODE associated with the failed MVS non-VSAM macro.

Severity

12 (severe)

DSNA607I ***csect-name*** **UNABLE TO** ***member-action*** **MEMBER=** ***member*** **OF DATA SET DSNAME=** ***dsname*****, MEMBER NOT FOUND**

Explanation

The action on the library member failed because the library member was not found.

System action

Processing terminates.

User response

Specify a valid library for *member-name*.

Severity

12 (severe)

DSNA608I ***csect-name*** **UNABLE TO** ***member-action*** **MEMBER=*member* OF DATA SET DSNAME=*dsname*, MVS *macname* MACRO FAILED WITH RETURN CODE=*xx***

Explanation

An MVS non-VSAM macro returned an unexpected return code when it was invoked. The 'csect-name' in the message identifies the CSECT that issued the message.

System action

Processing of the specified library member terminates.

User response

Refer to *z/OS DFSMS: Macro Instructions for Data Sets* for more information on the MVS RETURN CODE associated with the failed MVS non-VSAM macro.

Severity

12 (severe)

DSNA609I ***csect-name*** **UNABLE TO SUBMIT A JOB FOR EXECUTION, MVS** ***macname*** **MACRO FAILED WITH RETURN CODE=*xx***

Explanation

An error occurred when an MVS non-VSAM macro to open, write, or close the internal reader was called to write a complete job to the internal reader. The 'csect-name' in the message identifies the CSECT that issued the message.

System action

Processing terminates.

User response

Refer to *z/OS DFSMS: Macro Instructions for Data Sets* for more information on the MVS RETURN CODE associated with the failed MVS non-VSAM macro.

Severity

12 (severe)

DSNA610I ***csect-name*** **INSUFFICIENT RACF AUTHORITY FOR DATA SET**

Explanation

A RACF error was encountered while processing a data set.

System action

Processing the data set terminates.

User response

Contact the system programmer, or system administrator to arrange for the required RACF or equivalent security authorization. If more information is needed, look at the messages in the console log.

Severity

12 (severe)

DSNA611I ***csect-name*** **THE** ***data-set-attribute*** **OF THE DATA SET DSNAME=*dsname* IS NOT *yy***

Explanation

The data set indicated in the message cannot be processed because the data set attribute is not supported.

System action

No action is taken with the named data set.

Programmer response

Specify a data set with the correct data set attribute.

Severity

12 (severe)

DSNA612I ***csect-name*** **INSUFFICIENT SPACE FOR DATA SET**

Explanation

Insufficient disk space was encountered while writing to a data set.

System action

Processing of the data set terminates.

Programmer response

Allocate more space for the data set. If more information is needed, look at the messages in the console log.

Severity

12 (severe)

DSNA613I ***csect-name*** **THE DATA SET NAME DSNAME=*dsname* MUST NOT BEGIN WITH A PATTERN MATCHING CHARACTER**

Explanation

The specified data set name begins with an '*' or '%'. This is not allowed for filtering, because it will cause a massive search of the catalog and could tie up a lot of system resources.

System action

No action is taken with the named data set.

Programmer response

Correct the invalid data set name.

Severity

12 (severe)

DSNA614I ***csect-name*** **UNABLE TO OBTAIN** ***storage-usage*** **STORAGE, SIZE =** ***size*** **BYTES**

Explanation

An error occurred when the stored procedure or batch program attempted to obtain *size* bytes of storage for the *storage-usage* indicated. The *csect-name* in the message identifies the CSECT that issued the message.

System action

The stored procedure or batch program terminates.

Programmer response

Notify the system programmer before attempting to reissue the SQL CALL statement or run the batch program again.

Severity

12 (severe)

DSNA615I ***csect-name*** **UNABLE TO LOAD** ***module-name*** **MODULE, LOAD R15=***rc*

Explanation

An error resulted when an attempt was made to load the module indicated in the message.

System action

Processing terminates.

System programmer response

Verify that the named load module exists, and that Db2 can access it.

Programmer response

Notify the system programmer.

Severity

12 (severe)

DSNA616I ***csect-name*** **CATALOG SEARCH INTERFACE ERROR, R15=***xx*, **REASON CODE=** ***yy*** **RETURN CODE=***zz*

Explanation

An error occurred when the Catalog Search Interface (CSI) was called.

System action

Processing terminates.

Programmer response

Analyze the R15 reason code and return code values, and take the appropriate action.

Severity

12 (severe)

Related information

http://www-01.ibm.com/support/knowledgecenter/SSLTBW_2.3.0/com.ibm.zos.v2r3.bpxbd00/toc.htm

DSNA617I ***csect-name*** **IFCA ERROR, IFCARC1=***ifcarc1-value*, **IFCARC2=***ifcarc2-value*, **IFCABNM=***ifcabnm-value*, **IFCAGRSN=***ifcagrsn-value*, **IFCAGBNM=***ifcagbnm-value*

Explanation

An error occurred when submitting a Db2 command through the instrumentation facility interface (IFI). Tokens in the message indicate values of fields in the IFI Communication Area (IFCA):

ifcarc1-value
The X'E6.....' return code value, from the IFCARC1 field.

ifcarc2-value
The X'E6.....' reason code value, from the IFCARC2 field.

ifcabnm-value
The number of bytes that did not fit in the return area, from the value of the IFCABNM field.

ifcagrsn-value
Reason code for the situation in which an IFI calls requests data from members of a data sharing group, and not all the data is returned from group members, from the IFCAGRSN field.

ifcagbnm-value
Total length of data that was returned from other data sharing group members and did not fit in the return area, form the IFCAGBNM field.

System action

Processing terminates.

Programmer response

To diagnose the error, refer to the reason codes, and other IFCA field values that accompany the message to determine the cause of the error.

Severity

12 (severe error)

Related concepts
X'E6.....' codes (Db2 Codes)
Related reference
Instrumentation facility communications area (IFCA) (Db2 Performance)

DSNA618I ***csect-name* SQL ERROR DURING SQL STATEMENT *sql-statement*, *object-type* = *object-name***

Explanation

An SQL error resulted when the stored procedure issued an SQL statement for the indicated Db2 object.

csect-name
The name of the control section that issued the message.

sql-statement
The SQL statement that encountered the error.

object-type
The type of Db2 object that the failed SQL statement is processing.

object-name
The name of the Db2 object that the failed SQL statement is processing

System action

The stored procedure that issued the SQL statement terminates.

Information is written to the SQLCA. The information can be either:

- A formatted form of the SQLCA and a text message that is based on the SQLCODE field of the SQLCA.
- An unformatted form of the SQLCA.

Programmer response

Locate the additional information that is written to the SQLCA and take the appropriate action or actions.

Related concepts
SQL error codes (Db2 Codes)

DSNA619I ***csect-name* SUBSYSTEM INTERFACE ERROR, FUNCTION CODE=*n*, RETURN CODE=*xx*, SSOBRETN=*yy*, *additional-info***

Explanation

An error occurred when a subsystem interface (SSI) function was called. The 'csect-name' in the message identifies the CSECT that issued the message. The SSI function codes are:

- 54 - Request subsystem version information call
- 79- SYSOUT Application Program Interface
- 80 - Extended status function call

System action

Processing terminates.

Programmer response

Refer to *z/OS DFSMS: Macro Instructions for Data Sets* for more information on the MVS RETURN CODE associated with the failed MVS non-VSAM macro.

Severity

12 (severe)

DSNA620I ***csect-name* ERROR ALLOCATING DATA SET DSNAME=*dsname*, RETURN CODE=*xx*, ERROR REASON CODE=*yy*, INFO REASON CODE=*zz***

Explanation

An error occurred when the DYNALLOC macro was invoked to dynamically allocate the named data set.

System action

Processing terminates.

User response

Analyze the DYNALLOC RETURN CODE, error reason code, and the informational reason code values, and take the appropriate action.

Severity

12 (severe)

Related reference

Interpreting DYNALLOC return codes (MVS Programming Authorized Assembler Services Reference)

DSNA621I ***csect-name*** **ATTEMPT TO PERFORM RRS ATTACH FUNCTION** ***funcname*** **FAILED, RRS ATTACH RC=*rc*, RETCODE=*return-code* REASCODE=*reason-code***

Explanation

RRSAF returned an unexpected return code when it was called to connect to Db2.

System action

Processing terminates.

User response

Take the appropriate action for the specified RRSAF attach, return, and reason codes.

Severity

12 (severe)

Related concepts

RRSAF return codes and reason codes (Db2 Application programming and SQL)

Related tasks

Invoking the Resource Recovery Services attachment facility (Db2 Application programming and SQL)

Controlling RRS connections (Db2 Administration Guide)

DSNA622I ***csect-name*** **THE** ***function-name*** **FUNCTION CALL IS UNSUCCESSFUL,** ***reason***

Explanation

A z/OS C/C++ function returned an error.

csect-name
The name of the control section that issued the message.

function-name
The name of the z/OS C/C++ function.

reason
The run time error message string that corresponds to the error code *errno*, followed by the *errno2* value. (*errno* and *errno2* are z/OS C/C++ function error code values.)

System action

Processing terminates.

User response:
See the information about z/OS XL C/C++ run time library functions for descriptions of the error codes and take the appropriate action.

Severity

12 (severe error)

Related reference

z/OS XL C/C++ runtime library functions (C/C++ Run-Time Library Reference)

DSNA623I ***csect-name*** **THE PROCEDURE** ***procedure-name*** **DID NOT COMPLETE SUCCESSFULLY, RETURN CODE=*xx***

Explanation

The procedure *procedure-name* did not complete successfully when it was internally invoked, returning the indicated return code value. This message is followed by the error message returned by the named procedure, if applicable.

System action

Processing terminates.

User response

Review the error message returned by the named stored procedure.

Severity

12 (severe)

DSNA624I ***csect-name*** **THE STORED PROCEDURE ABENDED**

Explanation

The stored procedure abended and did not complete successfully.

System action

Processing terminates.

User response

Report the problem to IBM Support.

Severity

12 (severe)

DSNA625I ***csect-name*** **THE STORED PROCEDURE TASK WAS TERMINATED BY THE OPERATOR**

Explanation

The stored procedure did not complete successfully, because it was terminated by the operator.

System action

Processing terminates.

User response

Issue the SQL CALL statement again.

Severity

12 (severe)

DSNA626I ***csect-name*** **THE** ***function-name*** **FUNCTION CALL IS UNSUCCESSFUL,** ***parameter-name=parameter-value, reason***

Explanation

A z/OS C/C++ function or a TSO/E function returned an error when the specified parameter value was passed to the function.

csect-name
The name of the control section that issued the message.

function-name
The name of the z/OS C/C++ or TSO/E function.

parameter-name
The name of the function parameter.

parameter-value
The value of the function parameter.

reason
For z/OS C/C++ functions, *reason* is the run time error message string that corresponds to the error code *errno*, followed by the *errno2* value. (*errno* and *errno2* are z/OS C/C++ function error code values.)

For TSO/E functions, *reason* can be one of the following values:

- If *function-name* is LISTDSI, *reason* is the LISTDSI reason code (SYSREASON).
- If *function-name* is SYSDSN, *reason* is the message that is returned by SYSDSN.

System action

Processing terminates.

User response

For z/OS C/C++ functions, see the information about z/OS XL C/C++ run time library functions for descriptions of the error codes and take the appropriate action.

For TSO/E functions, see the information about LISTDSI and SYSDSN for descriptions of the TSO/E function errors and take the appropriate action.

Severity

12 (severe error)

Related reference

z/OS XL C/C++ runtime library functions (C/C++ Run-Time Library Reference)

LISTDSI (TSO/E REXX Reference)

SYSDSN (TSO/E REXX Reference)

DSNA627I ***csect-name*** **THE** ***funcname*** **FUNCTION CALL IS UNSUCCESSFUL, RETURN CODE=** ***xx*****, ERROR REASON CODE=*****yy*****, INFO REASON CODE=*****zz***

Explanation

A z/OS C/C++ function returned an unexpected return code. The 'csect-name' in the message identifies the CSECT that issued the message. The possible names of the z/OS C/C++ function are:

- dynalloc(): Allocate a data set
- dynfree(): Deallocate a data set

An error occurred when a subsystem interface (SSI) function was called. The 'csect-name' in the message identifies the CSECT that issued the message. The SSI function codes are:

- 54 - Request subsystem version information call
- 79- SYSOUT Application Program Interface
- 80 - Extended status function call

System action

If the function name is dynalloc(), then processing terminates.

Programmer response

Refer to *z/OS DFSMS: Macro Instructions for Data Sets* for information on the DYNALLOC RETURN CODE, ERROR REASON CODE, and INFO REASON CODE values.

Severity

12 (severe) if the function name is dynalloc(). If the function name is dynfree(), then the Severity is the dynfree() return code.

DSNA628I ***csect-name*** **THE** ***program-type program-name*** **ENCOUNTERED AN ERROR WHILE USING THE EXTENDED MCS CONSOLE TO ISSUE THE MVS SYSTEM COMMAND** ***command-name. additional-information***

Explanation

The stored procedure encountered an error when it attempted to activate the extended MCS console or retrieve messages that are queued to the extended MCS console.

csect-name
The name of the control section that issued the message.

program-type
The type of application that issued the MVS system command: BATCH PROGRAM or STORED PROCEDURE

program-name
The name of the batch program or stored procedure.

command-name
The system command that was issued.

additional-information
A string that provides more details about the reason for the message.

System action

Processing terminates.

Programmer response

For each of the macros that are described in *additional-information*, look up the associated return and reason codes in the MVS Programming Authorized Assembler Services information.

Related reference

MVS Programming: Authorized Assembler Services Reference SET-WTO

DSNA629I ***csect-name*** **THE PARAMETER** ***parm-name*** **RETURNED BY THE STORED PROCEDURE** ***proc-name*** **IS NOT VALID. INVALID REASON CODE=*xx***

Explanation

An invalid value was returned by the indicated procedure for the specified parameter. The cause of the invalid error is identified by the invalid reason code value in the message text. The specified parameter is not valid for the indicated reason:

3
Value is null.

System action

Processing terminates.

User response

Report the problem to IBM Support.

Severity

12 (severe)

DSNA631I ***csect-name*** **THE** ***jes-version*** **COMMAND** ***command*** **WAS ISSUED BUT NOT ACCEPTED**

Explanation

The command response received does not indicate whether the command was accepted or completed. The 'csect-name' in the message identifies the CSECT that issued the message. The possible commands are:

- CANCEL - Cancel a job
- PURGE - Purge a job

System action

Processing completes. The RETURN_CODE output parameter is 8 if the command was issued by a stored procedure.

User response

Issue the JES2 command $D JOB or the JES3 command *INQUIRY,J to display the current status of the job.

Severity

8 (error)

DSNA632I ***csect-name*** **JOB SUBMISSION FAILED**

Explanation

An error occurred while submitting a job for execution. A job identifier was not returned when the ENDREQ macro was issued after a complete job was written to the internal reader. The 'csect-name' in the message identifies the CSECT that issued the message.

System action

Processing terminates.

User response

Review the submitted JCL records to ensure that it has a valid JOB statement.

Severity

12 (severe)

DSNA634I ***csect-name*** **THE JES-MANAGED SYSOUT DATA SET IS EMPTY, JOBID=*jobid***

Explanation

A request was made to process SYSOUT data sets residing on JES spool for the indicated job identifier specified. However, the indicated job does not have any SYSOUT data sets.

System action

No action is taken with the specified job identifier.

User response

If the job action was requested by a stored procedure, correct the invalid job identifier on the SQL Call statement.

Severity

12 (severe)

DSNA635I ***csect-name*** **AN INTERNAL ERROR OCCURRED. *additional-info***

Explanation

An error has occurred, as indicated by additional information in the message:

additional-info
A string that provides additional details about the reason for the message.

System action

Processing terminates.

User response

When the value of *additional-info* refers to the SMS INTERFACE, see the information about SMS reason codes to diagnose the problem. Otherwise, contact IBM Software Support.

Severity

12 (severe error)

Related reference

Storage Management Subsystem Reason Codes(z/OS DFSMSdfp Diagnosis)

DSNA636I ***csect-name*** **DB2 THREAD WAS CANCELED**

Explanation

The thread running the stored procedure was cancelled.

System action

Processing terminates.

User response

If necessary, issue the SQL CALL statement again.

Severity

12 (severe)

DSNA637I ***csect-name*** **I/O ERROR ON DATA SET**

Explanation

An I/O error occurred while processing a data set or library member.

System action

Processing terminates.

User response

Look at the messages in the console log for more information. If necessary, report the problem to IBM Support.

Severity

12 (severe)

DSNA638I ***csect-name*** **THE SEQUENCE NUMBER** ***seq*** **IN ROW** ***rownum*** **OF TABLE** ***table-name*** **IS OUT OF SEQUENCE**

Explanation

The sequence number of the rows in the indicated table is not in ascending sequence, or the row sequence number does not start with 1.

System action

Processing terminates.

User response

Correct the sequence number of the rows in the indicated table.

Severity

12 (severe)

DSNA639I ***csect-name*** **THE NUMBER OF ROWS** ***table-size*** **IN THE INPUT TABLE** ***table-name*** **AND THE NUMBER OF OBJECTS** ***objnum*** **SPECIFIED IN THE PARAMETER** ***parm-name*** **DO NOT MATCH**

Explanation

The number of rows in the indicated table did not match the number of objects specified in the named parameter.

System action

Processing terminates.

User response

Correct the number of objects specified in the indicated parameter, or repopulate the named table with the correct number of rows.

Severity

12 (severe)

DSNA640I ***csect-name*** **SHUTDOWN DURATION** ***xxxx*** **REACHED, SHUTDOWN INITIATED**

Explanation

When the overall execution time reached the indicated shutdown duration, shutdown was initiated. When shutdown is initiated, current utility executions run to completion but no new utility will be started.

System action

Current utility executions are allowed to run to completion, but no new utility will be started.

User response

Determine which objects have not been processed due to the shutdown. Call SYSPROC.ADMIN_UTL_SCHEDULE again to process the unprocessed objects. If necessary, increase the SHUTDOWN_DURATION input parameter on the SQL CALL statement.

Severity

4 (warning)

DSNA642I **DSNADMCS CALL TO** ***name*** **INTERFACE FAILED, ATTCHMVS RC=***return-code*

Explanation

An error occurred when attaching a Db2 BIND service, DSNESM71, to execute the indicated DSN subcommand.

name
The DSN subcommand. Possible values are BIND, REBIND, or FREE.

return-code
The return code from ATTCHMVS. If *return-code* is 99, a failure occurred when the Db2 BIND service issued RRS IDENTIFY, SIGNON, or CREATE THREAD.

System action

The stored procedure terminates.

System programmer response

For more information about the ATTCHMVS return code, see the information about host command environments.

Severity

12 (severe error)

Related reference

Host command environments for linking to and attaching programs (TSO/E REXX Reference)

Host commands and host command environments (TSO/E REXX Reference)

DSNA643I ***csect-name*** **INVALID CREDENTIALS, ERRNO=*errno***

Explanation

The stored procedure is unable to log in because the USERID or PASSWORD parameter in the SQL CALL statement is invalid.

The *csect-name* in the message identifies the CSECT that issued the message.

System action

The stored procedure terminates.

Programmer response

Specify valid credentials in the SQL CALL statement. If the problem persists, ask your security administrator to check the security configuration for the specified user.

Severity

12 (severe)

DSNA644I **THE STORED PROCEDURE *procedure-name* CAN ONLY BE EXECUTED IN *mode* MODE.**

Explanation

A stored procedure has been called in a Db2 mode that is not allowed.

procedure-name
The name of the stored procedure.

mode
The mode that is required for this stored procedure.

System action

Execution of the stored procedure stops.

User response

Change Db2 to the mode that is identified by *mode* in the message and run the stored procedure again.

Severity

12 (severe error)

DSNA645I ***csect-name*** **THE PARAMETER MAX_INVOCATIONS IS NOT 1 ALTHOUGH NO SCHEDULE IS DEFINED**

Explanation

This input parameter must be set to 1 when parameters INTERVAL, POINT_IN_TIME and TRIGGER_TASK_ID are null.

The *csect-name* in the message identifies the CSECT that issued the message.

System action

The stored procedure terminates.

Programmer response

Specify 1 for MAX_INVOCATIONS in the SQL CALL statement.

Severity

12 (severe)

DSNA646I ***csect-name*** **THE PARAMETER *parm-name* HAS AN INVALID FORMAT, POS = *xx***

Explanation

The specified parameter in the message has an invalid format. The error was detected at position *xx* in the parameter value.

The *csect-name* in the message identifies the CSECT that issued the message.

System action

The stored procedure terminates.

Programmer response

Correct the value for the specified input parameter in the SQL CALL statement.

Severity

12 (severe)

DSNA648I **THE ACTION *action-name* IN ALERT *alert-id* IS NOT SUPPORTED.**

Explanation

The stored procedure ADMIN_UTL_EXECUTE did not recognize the action to be taken to process the alert.

action-name
The action that the stored procedure could not recognize.

alert-id
The alert identifier from the catalog table SYSIBM.SYSAUTOALERTS.

System action

The stored procedure continues to execute but the alert cannot be processed. The alert is ignored.

User response

Verify that the action is valid and the latest version of the stored procedure ADMIN_UTL_EXECUTE is installed.

Severity

4 (warning)

Related reference
ADMIN_UTL_EXECUTE stored procedure (Db2 SQL)

DSNA649I ALERTS COULD NOT BE RESOLVED BY PROCEDURE. REASON *reason-code*.

Explanation

The stored procedure ADMIN_UTL_EXECUTE could not resolve any alerts.

reason-code
The reason for the message or SQL code, indicated by one of the following values:

1
ADMIN_UTL_EXECUTE was not executed within a maintenance time window.

2
ADMIN_UTL_EXECUTE did not have enough time in the maintenance time window to resolve alerts.

System action

The stored procedure continues to execute, but the alerts cannot be processed. Alerts are ignored.

User response

Correct the condition that is indicated by the *reason-code* value.

Severity

4 (warning)

Related reference
ADMIN_UTL_EXECUTE stored procedure (Db2 SQL)

DSNA650I *csect-name* CANNOT CONNECT TO ADMIN SCHEDULER *scheduler-name*

Explanation

The stored procedure or user-defined function cannot connect to the specified administrative task scheduler. Either the name of the administrative task scheduler is incorrect or the administrative task scheduler is currently unavailable.

csect-name
The name of the control section that issued the message.

scheduler-name
The name of the administrative task scheduler.

System action

The stored procedure terminates.

System programmer response

Verify the name of the administrative task scheduler and change the ADMTPROC subsystem parameter, if necessary. Verify that the specified administrative task scheduler is up and running before calling this stored procedure again.

Severity

12 (severe error)

Related reference
ADMIN SCHEDULER field (ADMTPROC subsystem parameter) (Db2 Installation and Migration)

DSNA651I *csect-name* DB2 *db2-ssid* IS NOT ALLOWED TO CONNECT TO ADMIN SCHEDULER *scheduler-name*

Explanation

The specified administrative task scheduler does not accept requests from the specified Db2 subsystem.

csect-name
The name of the control section that issued the message.

db2-ssid
The Db2 subsystem identifier. The administrative task scheduler parameter DB2SSID must be set to

this value in order to accept requests from this Db2 subsystem.

scheduler-name
The name of the administrative task scheduler.

System action

The stored procedure terminates.

System programmer response

Verify the name of the administrative task scheduler and change the ADMTPROC subsystem parameter, if necessary. Verify that the specified administrative task scheduler is set up to accept requests from the specified Db2 subsystem.

Severity

12 (severe error)

Related reference
ADMIN SCHEDULER field (ADMTPROC subsystem parameter) (Db2 Installation and Migration)

DSNA652I ***csect-name*** **THE USER** ***user-name*** **IS NOT ALLOWED TO ACCESS TASK** ***task-id***

Explanation

The specified user, which is the value to which the special register CURRENT SQLID is set, is not allowed to update or delete the specified task. This user did not create the task and does not have SYSOPR, SYSCTRL, or SYSADM authority.

The *csect-name* in the message identifies the CSECT that issues the message.

System action

The stored procedure terminates.

Programmer response

Ensure that the Db2 special register (CURRENT SQLID) is set to the same user that added this task, or to a user that has SYSOPR, SYSCTRL, or SYSADM authority, before calling this stored procedure again.

Severity

12 (severe)

DSNA653I ***csect-name*** **CANNOT FIND ZPARM** ***zparm-name***

Explanation

The specified subsystem parameter (ZPARM) value is not defined.

csect-name
The name of the control section that issued the message.

zparm-name
The name of the subsystem parameter that is not defined.

The *csect-name* in the message identifies the CSECT that issues the message.

System action

The stored procedure terminates.

System programmer response

Define the specified subsystem parameter value.

If the subsystem parameter value is defined and the failing procedure is an administrative scheduler procedure, ensure that the user ID that runs the job is granted the MONITOR1 and MONITOR2 privileges.

Severity

12 (severe)

Related concepts
Subsystem parameters (Introduction to Db2 for z/OS)
Architecture of the administrative task scheduler (Db2 Administration Guide)

Related reference
Directory of subsystem parameters, panel fields, and application default values (Db2 Installation and Migration)
System privileges (RACF Access Control Module Guide)

DSNA654I ***csect-name*** **THE TASK** ***task-name*** **DOES NOT EXIST**

Explanation

The specified task cannot be updated or removed because it does not exist in the administrative task scheduler task list.

csect-name
The name of the control section that issued the message.

task-name
The unique name of the scheduled administrative task.

System action

The stored procedure terminates.

Programmer response

Verify the task ID. Correct the task ID, if necessary, and resubmit the request.

Severity

12 (severe error)

DSNA655I ***csect-name*** **THE TASK** ***task-name*** **HAS AN EXECUTION STATUS THAT IS NOT COMPATIBLE WITH THE REQUESTED ACTION.**

Explanation

The specified task cannot be removed because it is currently executing, or it cannot be cancelled because it is not executing.

csect-name
The name of the control section that issued the message.

task-name
The unique name of the task to be removed or cancelled.

System action

The stored procedure terminates.

Programmer response

Wait for the completion of this task before trying to remove it. Use the DSNADM.ADMIN_TASK_STATUS user-defined function to check the execution status of the task.

Severity

12 (severe)

DSNA656I ***csect-name*** **THE ADMIN SCHEDULER** ***scheduler-name*** **TASK LIST IS FULL**

Explanation

The task list for the specified administrative task scheduler has reached its maximum size. No tasks can be added until other tasks are removed from the task list.

csect-name
The name of the control section that issued the message.

scheduler-name
The name of the administrative task scheduler.

System action

The stored procedure terminates.

Programmer response

Delete one or more tasks that have already been executed and whose status is no longer required.

Severity

12 (severe error)

Related tasks

Removing a scheduled task (Db2 Administration Guide)

DSNA657I ***csect-name*** **THE ADMIN SCHEDULER** ***scheduler-name*** **CANNOT ACCESS ITS TASK LISTS**

Explanation

The specified administrative task scheduler cannot access any of its task lists to make the requested changes. Tasks cannot be added, removed, or updated.

csect-name
The name of the control section that issued the message.

scheduler-name
The name of the administrative task scheduler.

System action

The stored procedure and the administrative task scheduler both terminate.

System programmer response

Check the operator console messages for other messages about the administrative task scheduler, and take the appropriate action or actions.

At least one of the redundant administrative task scheduler task lists must be available to start the administrative task scheduler.

Severity

12 (severe error)

Related concepts

Task lists of the administrative task scheduler (Db2 Administration Guide)

DSNA658I ***csect-name*** **THE** ***parameter-name*** **PARAMETER WAS MODIFIED** ***change-type*** **IN MODULE** ***module-name*** **BY USER** ***authorization-name*****. THE OLD SETTING WAS** ***old-setting*****. THE NEW SETTING IS** ***new-setting*****.**

Explanation

A user modified the value of the specified Db2 subsystem parameter by using the SYSPROC.ADMIN_UPDATE_SYSPARM stored procedure. This message is an informational message that is issued once for every parameter that was modified by this stored procedure.

csect-name
The name of the control section that issued the message.

parameter-name
The subsystem parameter for which the value was modified.

change-type
The type of change, which can be one of the following values:

ONLINE
SYSPROC.ADMIN_UPDATE_SYSPARM used the SET SYSPARM command to load module *module-name* and change the value of the subsystem parameter immediately.

OFFLINE
The new value of the subsystem parameter does not become effective until the next time that Db2 is started with module *module-name*.

module-name
The name of the subsystem parameter load module.

authorization-name
The authorization ID of the user who requested the change.

old-setting
The value of the subsystem parameter before the change was requested.

new-setting
The new value of the subsystem parameter.

System action

Processing continues.

User response

No action is required.

Related reference

ADMIN_UPDATE_SYSPARM stored procedure (Db2 SQL)

-SET SYSPARM (Db2) (Db2 Commands)

DSNA659I ***csect-name*** **THE TASK** ***task-name*** **TRIGGERS DEPENDENT TASKS**

Explanation

The execution of the specified task triggers the execution of one or more tasks defined in the administrative task scheduler task list. This task cannot be removed until the dependencies have been removed.

csect-name
The name of the control section that issued the message.

task-name
The unique name of the scheduled administrative task.

System action

The stored procedure terminates.

Programmer response

Remove the dependent tasks.

Severity

12 (severe error)

DSNA660I ***csect-name*** **AN INTERNAL ERROR HAS OCCURRED**

Explanation

The administrative task scheduler could not access internal resource that should be available.

csect-name
The name of the control section that issued the message.

System action

The stored procedure terminates.

System programmer response

Gather the administrative task scheduler trace, and contact IBM support.

Severity

12 (severe error)

DSNA661I ***csect-name*** **THE MACRO** ***macro-name*** **FAILED WITH RETURN CODE=*return-code***

Explanation

A Db2 stored procedure attempted to use a z/OS macro to identify attributes of a data set, and the macro failed.

csect-name
The name of the control section that issued the message.

macro-name
The name of the z/OS macro.

return-code
A numeric value that indicates the reason for the failure. This return code is issued by z/OS.

System action

Processing continues.

Programmer response

Review the return codes for the macro that is identified by the *macro-name* value and take the indicated action.

Related reference

DFSMS Macro Instructions for Data Sets

MVS Programming: Authorized Assembler Services Reference SET-WTO

Related information

DFSMSdfp Advanced Services

DSNA662I ***csect-name*** **CATALOG MANAGEMENT HAS DETECTED AN ERROR FOR** ***entry-name*****. RETURN CODE=*return-code*, REASON CODE=*reason-code***

Explanation

A catalog error occurred when a Db2 stored procedure attempted to use the Catalog Search Interface to obtain information about data sets.

csect-name
The name of the control section that issued the message.

entry-name
The entry name returned by the Catalog Search Interface.

return-code
A numeric value that indicates the reason for the failure. This return code is issued by catalog management.

reason-code
A numeric value that indicates the reason for the failure. This reason code is issued by catalog management.

System action

Processing continues.

Programmer response

Use the information provided for the return and reason codes for message IDC3009I to correct the catalog error.

Related reference

Message IDC3009I (MVS System Messages)

DSNA663I ***csect-name*** **THE ATTRIBUTES OF** ***dataset-count*** **DATA SETS HAVE NOT BEEN SUCCESSFULLY RETRIEVED.**

Explanation

The Db2 stored procedure ADMIN_DS_LIST could not retrieve all attributes of one or more data sets.

csect-name
The name of the control section that issued the message.

dataset-count
The number of rows in the result set where the ERRMSG column is not blank. If a data set spans more than one volume, and ADMIN_DS_LIST could not retrieve all the attributes of a volume where this data set resides, this volume counts as one row in the count.

System action

Processing continues.

Programmer response

Scan the ERRMSG column of the result set to identify the data sets whose attributes have not all been successfully retrieved. Use the information provided in the ERRMSG column to correct the data set error.

DSNA664I ***csect-name*** **THE VOLUME SPACE STATISTICS OF*****object-count*** **OBJECTS HAVE NOT BEEN SUCCESSFULLY RETRIEVED.**

Explanation

The ADMIN_INFO_SMS stored procedure was unable to retrieve the volume space statistics for one or more objects.

csect-name
The name of the control section that issued the message.

object-count
The number of rows in the result set that contain non-blank values in the ERRMSG column.

System action

Processing continues.

Programmer response

Scan the ERRMSG column of the result set to identify the objects whose volume space statistics have not been successfully retrieved. Use the information provided in the ERRMSG column to correct the error.

Related reference
ADMIN_INFO_SMS stored procedure (Db2 SQL)

DSNA665I ***csect-name* THE ALERT *skipped-alert* CANNOT BE EXECUTED. REASON=*reason-text***

Explanation

The stored procedure ADMIN_UTL_EXECUTE did not execute the indicated alert because it executed a different alert instead.

csect-name
The name of the control section that issued the message.

skipped-alert* and *alternate-alert
Unique alert IDs. These values represent the primary key (ALERT_ID column) of a row in the SYSIBM.SYSAUTOALERTS table.

This message always includes two alert IDs. The first alert ID in the message (*skipped-alert*) is not executed. The second alert ID in the message (*alternate-alert*, which is part of the *reason-text*), is executed instead of the skipped alert. The two alert IDs refer to the same object, such as a table space.

reason-text
A brief explanation of why the skipped alert was not executed, including the ID of the alert that was executed in its place.

ACTION OVERRULED BY ALERT *alternate-alert*
The action to solve the skipped alert is overruled by the action to solve the indicated one.

ALREADY EXECUTING SIMILAR ALERT *alternate-alert*
The action to solve the skipped alert is the same as the action to solve the indicated one, and the action is currently executing.

System action

The skipped alert (*skipped-alert*) is not executed and is marked as completed. The alternate alert (*alternate-alert*) is executed instead.

User response

No action is required.

Severity

0 (informational)

Related reference
ADMIN_UTL_EXECUTE stored procedure (Db2 SQL)

DSNA666I ***csect-name* A REQUIRED ACTION WAS NOT COMPLETED AFTER THE SUBSYSTEM PARAMETERS WERE MODIFIED. ACTION-TYPE= *action-type*. REASON CODE=*reason-code*. *additional-info***

Explanation

A user modified the value of at least one Db2 subsystem parameter by using the SYSPROC.ADMIN_UPDATE_SYSPARM stored procedure. However, Db2 did not complete a required or requested action after the subsystem parameter values were changed.

Message DSNA666I is returned in the result table of the SYSPROC.ADMIN_UPDATE_SYSPARM stored procedure.

csect-name
The name of the control section that issued the message.

action-type
A numeric value that identifies the action that failed. *action-type* can be one of the following values:

01
The SET SYSPARM command with the LOAD option was not invoked.

02
The message DSNA658I was not displayed on the JES SYSLOG.

reason-code
A numeric value that indicates the reason for the failure. *reason-code* can be one of the following values:

01
The meaning depends on the *action-type* value as follows:

- If the *action-type* is 01, at least one modified subsystem parameter cannot be changed online.
- If the *action-type* is 02, the stored procedure encountered an error while displaying a DSNA658I message on the JES SYSLOG.

02
Synchronous processing of the SET SYSPARM command is not supported.

additional-info
Additional descriptive text that explains the reason that the specified action failed.

Although *additional-info* is part of message DSNA666I, it is not returned in the same result set row. *additional-info* is returned in a separate row after DSNA666I.

System action

Processing continues.

User response

Depending on the value of *action-type* and *reason-code* take one of the following actions:

***action-type* value**	***reason-code* value**	**Corrective action**
01	01	In the input table SYSIBM.SYSPARM_SETTINGS, specify only those subsystem parameters that can be changed online.
01	02	Ensure that APAR PM40501 is installed.
02	01	Check for the return code from module DSNADMCC in the *additional-info* field and report the problem to IBM Software Support.

Related reference
ADMIN_UPDATE_SYSPARM stored procedure (Db2 SQL)
-SET SYSPARM (Db2) (Db2 Commands)

Related information
DSNA658I

csect-name THE *parameter-name* PARAMETER WAS MODIFIED *change-type* IN MODULE *module-name* BY USER *authorization-name*. THE OLD SETTING WAS *old-setting*. THE NEW SETTING IS *new-setting*.

DSNA667I ***csect-name* AN ERROR WAS ENCOUNTERED WHEN ADDING OR DELETING THE *environment-name* HOST COMMAND ENVIRONMENT USING *function-name*. ACTION=*action-type*. RC=*return-code*.**

Explanation

A Db2 stored procedure attempted to add or delete a host command environment, but the host command environment add or delete failed.

csect-name
The name of the control section that issued the message.

environment-name
The name of the host command environment: DSNREXX or SDSF.

function-name
The function that was invoked: RXSUBCOM or ISFCALLS.

action-type
The action that was specified: ADD or DELETE.

return-code
A numeric value that provides information about the failure. This return code is issued by the host command environment.

If *function-name* is RXSUBCOM and *return-code* is 40, RXSUBCOM found an error in the parameter list passed to it, such as too many or too few parameters.

System action

Processing terminates.

Programmer response

Review the return code information for the host command environment and take the indicated action.

Related reference
Return codes for ISFEXEC (z/OS SDSF Operation and Customization)
Return codes for IRXSUBCM (TSO/E REXX Reference)

DSNA668I ***csect-name*** **AN ERROR WAS ENCOUNTERED WHEN INVOKING THE HOST ENVIRONMENT COMMAND *host-command* WITH OPERAND *operand-name*. RC=*return-code*.**

Explanation

A Db2 stored procedure invoked a host environment command and the command failed.

csect-name
The name of the control section that issued the message.

host-command
The name of the host environment command: ISFEXEC or ISFLOG.

operand-name
The name of the operand that was specified for the host command.

return-code
A numeric value that provides information about the failure. This return code is issued by the host command environment.

If *return-code* is 12 and message DSNA668I is followed by the following SDSF messages, the stored procedure must be executed on a system that has z/OS V1R12 or later installed.

```
ISF302E string was seen in command position
1 where one of the following was expected:
END-OF-STMT, ISFACT, ISFEXEC, ISFGET.
ISF767I Request completed
```

System action

Processing terminates. This message might be followed by one or more messages from the host environment command.

Programmer response

Check for additional messages from the host environment command. Review the return code information for the host environment command and take the indicated action.

Related reference

Return codes for ISFEXEC (z/OS SDSF Operation and Customization)

Return codes for ISFLOG (z/OS SDSF Operation and Customization)

DSNA669I ***csect-name*** **THE SUBSYSTEM PARAMETERS WERE NOT MODIFIED. REASON CODE=*reason-code*. *additional-info***

Explanation

A user requested a change to the value of at least one Db2 subsystem parameter by using the SYSPROC.ADMIN_UPDATE_SYSPARM stored procedure. However, the subsystem parameters were not modified for the indicated reason.

Message DSNA669I is returned in the result table of the SYSPROC.ADMIN_UPDATE_SYSPARM stored procedure, unless the *reason-code* value is 01, 04, 05, 06, or 07. In these special cases, DSNA669I is displayed in the WLM job log.

csect-name
The name of the control section that issued the message.

reason-code
A numeric value that indicates the reason for the failure. *reason-code* can be one of the following values:

01
A REXX programming violation occurred.

02
The created global temporary table SYSIBM.SYSPARM_SETTINGS does not exist.

03
The user does not have the authority to use the created global temporary table SYSIBM.SYSPARM_SETTINGS.

04
The created global temporary table SYSIBM.UPDSYSPARM_MSG does not exist.

05
The user does not have authority to use the created global temporary table SYSIBM.UPDSYSPARM_MSG.

06
The DSNREXX package was not found.

07
Db2 cannot access a DSNREXX environment. Db2 REXX Language Support is not available.

08
All libraries in the WLM STEPLIB concatenation are APF-authorized.

09
An error occurred when validating an input parameter for the stored procedure.

10
The WLM startup procedure is missing the ZPMDFLTS DD statement.

11
A data set that is required by the stored procedure is not available for use.

12

A validation error occurred for input table SYSIBM.SYSPARM_SETTINGS for one of the following reasons:

- The table is empty.
- The table has a duplicate ROWNUM value.
- The table has a negative ROWNUM value.
- A macro name is invalid.
- A parameter is invalid.

13

An SQL error occurred when retrieving new subsystem parameter values from the input table SYSIBM.SYSPARM_SETTINGS.

14

The specified *source_library* parameter for the ADMIN_UPDATE_SYSPARM stored procedure is not a partitioned data set (PDS) or a partitioned data set extended (PDSE).

15

The record format (RECFM) of the specified *source_library* parameter for the ADMIN_UPDATE_SYSPARM stored procedure is not F or FB.

16

The record length (LRECL) of the specified *source_library* parameter for the ADMIN_UPDATE_SYSPARM stored procedure is not 80.

17

The ZPMDFLTS DD statement in the WLM startup procedure points to a data set that contains a SRCLIB_NAME library data set. That SRCLIB_NAME data set is not a partitioned data set (PDS) or a partitioned data set extended (PDSE).

18

The ZPMDFLTS DD statement in the WLM startup procedure points to a data set that contains a SRCLIB_NAME library data set. The record format (RECFM) of that SRCLIB_NAME data set is not F or FB.

19

The ZPMDFLTS DD statement in the WLM startup procedure points to a data set that contains a SRCLIB_NAME library data set. The record length (LRECL) of that SRCLIB_NAME data set is not 80.

20

The backup of the member that the stored procedure is to replace did not complete successfully. The member was to be replaced with the new JCL to assemble and link-edit the new subsystem parameters load module. The failure occurred for one of the following reasons:

- A backup already exists.
- An I/O error occurred.

21

One of the following errors occurred when retrieving the current values of the subsystem parameters:

- The SYSPROC.ADMIN_INFO_SYSPARM stored procedure did not complete successfully. Either the return code was greater than 0 or the SQL code was not +466, as expected.
- An SQL error occurred when processing the result set from the SYSPROC.ADMIN_INFO_SYSPARM stored procedure.

22

The required program ASMA90 was not found.

23

The required program HEWL (which executes the linkage editor) was not found.

24

The process of assembling the subsystem parameter macros did not complete successfully. The return code was greater than 0.

25

The backup of the subsystem parameters load module that is being replaced did not complete successfully for one of the following reasons:

- The backup already exists.
- A SYSDSN error occurred for a backup member.
- IEBCOPY failed to make a backup copy.

26

The process of link-editing the subsystem parameters load module did not complete successfully. The return code was greater than 4.

27

The SET SYSPARM command with the LOAD option did not complete successfully for one of the following reasons:

- The SYSPROC.ADMIN_COMMAND_DB2 stored procedure did not complete successfully. Either an IFI error occurred, the return code was greater than 0, or the SQL code was not +466, as expected.

- The SET SYSPARM command returned messages that indicate that the command was not successful.

28

The result of the SET SYSPARM command with the LOAD option is unknown. An SQL error occurred when processing the result set of the ADMIN_COMMAND_DB2 stored procedure.

32

An I/O error occurred when accessing assembler and link-edit files.

33

The JCL to assemble and link-edit the new subsystem parameters load module was not saved for one of the following reasons:

- A data set allocation error occurred.
- A data set I/O error occurred.

34

The SYSPROC.ADMIN_UPDATE_SYSPARM stored procedure could not retrieve the subsystem name of the connected Db2 subsystem.

35

The SYSPROC.ADMIN_UPDATE_SYSPARM stored procedure could not retrieve the subsystem name and command prefix of the Db2 subsystem whose subsystem parameters are to be modified. This situation occurred for one of the following reasons:

- The SYSPROC.ADMIN_COMMAND_DB2 stored procedure did not complete successfully. Either an IFI error occurred, the return code was greater than 0, or the SQL code was not +466, as expected.
- An SQL error occurred when processing the result set from the ADMIN_COMMAND_DB2 stored procedure.
- The version of Db2 is not supported.

additional-info

Additional descriptive text or another message that explains the reason that the specified action failed.

Although *additional-info* is part of message DSNA669I, it is not returned in the same result set row. *additional-info* is returned in a separate row after DSNA669I. The exception is if the *reason-code* value is 01, 04, 05, 06, or 07. In these special cases, DSNA669I and the additional text are displayed in the WLM job log.

System action

The SYSPROC.ADMIN_UPDATE_SYSPARM stored procedure terminates, unless the error is encountered during cleanup or restore processing.

User response

Check the *additional-info* field for a more detailed explanation of the error and take the appropriate action.

- If a DSN message is specified, see the information for the specific Db2 for z/OS message.
- If an EXECIO error was encountered, see the information about EXECIO for a description of the return code.
- If an allocation error was encountered, see the information about the ALLOCATE TSO/E command for a description of the ALLOCATE return code. Also, check the ALLOCATE error message that was returned by the stored procedure. The ALLOCATE error message is in the result set row after the row where the ALLOCATE return code is specified.
- If an assembly, link-edit, or IEBCOPY error was encountered, check the corresponding listing that is returned by the stored procedure.

Related reference

ADMIN_UPDATE_SYSPARM stored procedure (Db2 SQL)

EXECIO (TSO/E REXX Reference)

ALLOCATE command (TSO/E Command Reference)

DSNA670I ***csect-name*** **THE ADMIN SCHEDULER** ***scheduler-name*** **IS STOPPING**

Explanation

The specified administrative task scheduler is stopping.

csect-name

The name of the control section that issued the message.

scheduler-name

The name of the administrative task scheduler.

System action

The administrative task scheduler stops.

User response

No action is required.

Severity

0 (informational)

DSNA671I ***csect-name*** **THE ADMIN SCHEDULER** ***scheduler-name*** **IS STARTING**

Explanation

The specified administrative task scheduler is starting.

csect-name
The name of the control section that issued the message.

scheduler-name
The name of the administrative task scheduler.

System action

The administrative task scheduler starts.

User response

No action is required.

Severity

0 (informational)

DSNA672I ***csect-name action-description scheduler-name*** **NORMAL COMPLETION**

Explanation

The indicated action completed successfully for the specified administrative task scheduler.

csect-name
The name of the control section that issued the message.

action-description
The action that has completed. Possible actions include:

- START COMMAND FOR ADMIN SCHEDULER
- STOP COMMAND FOR ADMIN SCHEDULER
- MODIFY COMMAND FOR ADMIN SCHEDULER

scheduler-name
The name of the administrative task scheduler.

System action

The administrative task scheduler executed the specified action.

User response

No action is required.

Severity

0 (informational)

DSNA673I ***csect-name action-description scheduler-name*** **ABNORMAL TERMINATION**

Explanation

The described action was terminated because of an error in the specified administrative task scheduler.

csect-name
The name of the control section that issued the message.

action-description
The action that did not complete. Possible actions include:

- START COMMAND FOR ADMIN SCHEDULER
- STOP COMMAND FOR ADMIN SCHEDULER
- MODIFY COMMAND FOR ADMIN SCHEDULER
- EXECUTION LOOP OF ADMIN SCHEDULER

scheduler-name
The name of the administrative task scheduler.

System action

The administrative task scheduler terminates.

Programmer response

Investigate other error messages that were displayed on the operator's console prior to this message.

Severity

12 (severe error)

DSNA674I ***csect-name*** **THE ADMIN SCHEDULER** ***scheduler-name*** **IS ALREADY ACTIVE**

Explanation

The administrative task scheduler that is starting up has detected another address space with the same name that is already running on the system. Only one instance of the administrative task scheduler is allowed to run.

csect-name
The name of the control section that issued the message.

scheduler-name
The name of the administrative task scheduler.

System action

The administrative task scheduler that was already running remains active. The one that was starting terminates.

User response

No action is required.

Severity

12 (severe error)

DSNA675I ***csect-name module-name*** **COULD NOT RUN BECAUSE IT WAS NOT INVOKED FROM AN APF-AUTHORIZED LIBRARY**

Explanation

The load module could not run.

csect-name
The name of the control section that issued the message.

module-name
The name of the load module.

Either of the following conditions can cause this error:

- The load module that is identified by *module-name* was not invoked from an APF-authorized library.
- One or more libraries in the STEPLIB or JOBLIB concatenation in the job that invokes the load module that is identified by *module-name* is not APF-authorized.

System action

The administrative task scheduler, stored procedure, or batch program is not started.

System programmer response

Ensure that all libraries in the STEPLIB and JOBLIB concatenation for the job that invokes *module-name* are APF-authorized.

User response

Notify the system programmer.

Severity

12 (severe error)

DSNA676I ***csect-name*** **SEVERE ERROR ENCOUNTERED WHILE STARTING OR STOPPING ADMIN SCHEDULER** ***scheduler-name***

Explanation

A severe error has been detected in the specified administrative task scheduler.

csect-name
The name of the control section that issued the message.

scheduler-name
The name of the administrative task scheduler.

System action

The administrative task scheduler terminates.

Programmer response

Gather the administrative task scheduler trace, and contact IBM support.

Severity

12 (severe error)

DSNA677I ***csect-name*** **THE** ***application-type procedure-name*** **CAN ONLY CREATE** ***threads-created*** **OF** ***threads-requested*** **THREADS**

Explanation

There are not enough resources available to create all the requested threads.

csect-name
The name of the control section that issued the message.

application-type **and** ***procedure-name***
The type and name of the application.

ADMIN SCHEDULER
The procedure is the administrative task scheduler. The name that is provided is the name of a scheduled task.

STORED PROCEDURE
The procedure is a stored procedure. The name that is provided is the name of the stored procedure.

threads-created
The number of threads that were created.

threads-requested
The number of threads that were requested.

System action

The administrative task scheduler or stored procedure terminates.

System programmer response

Take the action indicated by the value of *application-type*:

ADMIN SCHEDULER
Either increase system resources to allow the administrative task scheduler to create the number of threads needed, or lower the maximum number of threads that the administrative task scheduler is allowed to use. The parameter MAXTHD controls the maximum number of threads that the administrative task scheduler is allowed to use.

STORED PROCEDURE
Either reduce the number of parallel threads, or increase the value of the CTHREAD subsystem parameter to allow the stored procedure to create the number of threads indicated by the value of *threads-requested*.

Severity

12 (severe error)

Related concepts
Multi-threading in the administrative task scheduler (Db2 Administration Guide)
Related tasks
Installation step 22: Set up the administrative task scheduler (Db2 Installation and Migration)
Related reference
MAX USERS field (CTHREAD subsystem parameter) (Db2 Installation and Migration)

DSNA678I ***csect-name*** **THE NUMBER OF TASKS TO BE CONCURRENTLY EXECUTED BY THE ADMIN SCHEDULER** ***scheduler-name*** **EXCEEDS** ***max-threads***

Explanation

The current number of tasks to be executed concurrently exceeds the maximum number of threads that is allowed by the specified administrative task scheduler.

csect-name
The name of the control section that issued the message.

scheduler-name
The name of the administrative task scheduler.

max-threads
The number of threads that were created.

System action

The administrative task scheduler continues running, but some scheduled tasks cannot be executed.

Programmer response

Change the execution schedule of some tasks, if possible.

Severity

12 (severe error)

Related concepts
Multi-threading in the administrative task scheduler (Db2 Administration Guide)
Related tasks
Interacting with the administrative task scheduler (Db2 Administration Guide)

DSNA679I ***csect-name*** **THE ADMIN SCHEDULER** ***scheduler-name*** **CANNOT ACCESS TASK LIST** ***task-list*****, REASON =** ***reason-indicator***

Explanation

The specified administrative task scheduler cannot access the task list.

csect-name
The name of the control section that issued the message.

scheduler-name
The name of the administrative task scheduler.

task-list
The task list, which can be either a VSAM data set that contains the task list or the Db2 table SYSIBM.ADMIN_TASKS that contains the redundant task list.

reason-indicator
An indicator of the reason for the failure, which can be a VSAM access error, an SQL error code, or a Db2 error code.

System action

The administrative task scheduler continues running with access to the other task list only.

System programmer response

Verify the name of the VSAM data set and modify the administrative task scheduler started task procedure, if necessary. Stop and restart the administrative task scheduler with this new configuration.

Verify that Db2 is up and running and that the scheduler can connect to it and has access to the Db2 task list.

According to the reason specified, make sure the following conditions are met.

- The VSAM data set exists.
- The VSAM data is allocated.
- The VSAM data can be accessed from this system.
- The user who started the administrative task scheduler is allowed to access it for read and write.
- The Db2 system is up and running.
- The administrative task scheduler packages are correctly bound in Db2.
- The Db2 table SYSIBM.ADMIN_TASKS containing the task list exists.
- The user who started the administrative task scheduler is allowed to access it for read and write.

Severity

12 (severe error)

DSNA681I ***csect-name*** **THE ADMIN SCHEDULER** ***scheduler-name*** **TASK LIST** ***vsam-list*** **AND** ***table-list*** **ARE INCONSISTENT**

Explanation

The specified administrative task scheduler has detected that the redundant task lists do not match.

csect-name
The name of the control section that issued the message.

scheduler-name
The name of the administrative task scheduler.

vsam-list
The task list that is stored as a VSAM data set.

table-list
The task list that is stored in a Db2 table.

System action

The administrative task scheduler tries recovering the older task list from the newer task list.

Programmer response

Look for additional messages that indicate the result of the recovery process.

Severity

0 (informational)

Related concepts

Architecture of the administrative task scheduler (Db2 Administration Guide)

DSNA682I ***csect-name*** **THE ADMIN SCHEDULER** ***scheduler-name*** **TASK LIST** ***task-list*** **IS SUCCESSFULLY RECOVERED**

Explanation

The specified administrative task scheduler has successfully recovered a corrupted or outdated task list from the redundant task list.

csect-name
The name of the control section that issued the message.

scheduler-name
The name of the administrative task scheduler.

task-list
The task list that has been recovered.

System action

Both task lists are in a consistent state.

User response

No action is required.

Severity

0 (informational)

DSNA683I ***csect-name*** **THE ADMIN SCHEDULER** ***scheduler-name*** **TASK LIST** ***task-list*** **CANNOT BE RECOVERED**

Explanation

The specified administrative task scheduler could not recover a corrupted or outdated task list from the redundant task list.

csect-name
The name of the control section that issued the message.

scheduler-name
The name of the administrative task scheduler.

task-list
The task list that could not be recovered.

System action

The administrative task scheduler continues running with access to only one task list.

Programmer response

Gather the administrative task scheduler trace, and contact IBM support.

Severity

12 (severe error)

DSNA684I ***csect-name*** **DFLTUID CANNOT BE THE USER** ***user-name*** **THAT STARTS THE ADMIN SCHEDULER** ***scheduler-name***

Explanation

The specified administrative task scheduler started task parameter (DFLTUID) is set to the specified user name. This user is the same user that is associated with the started task. For security reasons, this assignment is not allowed.

csect-name
The name of the control section that issued the message.

user-name
The user name that was provided to start the administrative task scheduler. This name is specified in the DFLTUID parameter.

scheduler-name
The name of the administrative task scheduler.

System action

The administrative task scheduler does not start.

System programmer response

Specify another user name in the DFLTUID parameter. The default execution user should have minimal access rights on the system, and should have no access to administrative task scheduler resources.

Severity

12 (severe error)

Related tasks

Installation step 22: Set up the administrative task scheduler (Db2 Installation and Migration)

Related reference

Security guidelines for the administrative task scheduler (Db2 Administration Guide)

DSNA685I ***csect-name application-name action-type*** **PROCESSING DID NOT COMPLETE SUCCESSFULLY. OBJECT-TYPE=*object-type*, OBJECT-NAME=*object-name*, OBJECT-BACKUP-NAME=*object-backup-name*. *additional-info***

Explanation

One of the following events occurred:

- An object was not restored after the application that replaced it failed to complete successfully.
- A new object or a backup object was not deleted after the application that created it failed to complete successfully.
- A backup object was not deleted after that application the created it completed successfully.

Message DSNA685I is returned in the result table of the SYSPROC.ADMIN_UPDATE_SYSPARM stored procedure.

csect-name
The name of the control section that issued the message.

application-name
The name of the application.

action-type
The type of action that did not complete. *action-type* can be one of the following values:

CLEANUP
The cleanup processing that occurs when *application-name* completes, regardless of whether the application is successful. An attempt to delete either *object-name* or *object-backup-name* failed.

RESTORE
The restore processing that occurs when *application-name* does not complete successfully and must restore all replaced objects to their state before the application was run. An attempt to restore an object from the object backup failed.

object-type
A numeric value that identifies the type of object that was not cleaned up or restored. *object-type* can be one of the following values:

01
The JCL to assemble and link-edit the subsystem parameters load module.

02
The subsystem parameters load module.

03
The active subsystem parameters load module in storage.

object-name
The name of the object.

object-backup-name
The name of the backup object.

additional-info
Additional text that describes the failure.

Although *additional-info* is part of message DSNA685I, it is not returned in the same result set row. *additional-info* is returned in a separate row after DSNA685I.

System action

Processing continues.

User response

Depending on the values in the message, take the action as indicated in the following table:

***action-type* value**	***object-type* value**	**Description of the error**	***object-name* value**	***object-backup-name* value**	**User response**
CLEANUP	01	The member that contains the new JCL to assemble and link-edit the new subsystem parameters load module was not deleted.	The name of the member with the new JCL	NA	Delete the member with the specified object name (*object-name*) from the JCL source library.
CLEANUP	01	The backup of the member that the stored procedure replaced with the new JCL to assemble and link-edit the new subsystem parameters load module	NA	The backup name of the member that the stored procedure replaced with the new JCL	Delete the member with the specified backup object name (*object-backup-name*) from the JCL source library.
CLEANUP	02	The member with the new subsystem parameters load module was not deleted.	The name of the member with the new subsystem parameters load module	NA	Delete the member with the specified object name (*object-name*) from the subsystem parameters load module library.
CLEANUP	02	The backup of the member that the stored procedure replaced with the new subsystem parameters load module was not deleted.	NA	The backup name of the member that the stored procedure replaced with the new subsystem parameters load module	Delete the member with the specified backup object name (*object-backup-name*) from the subsystem parameters load module library.
RESTORE	01	The member that the stored procedure replaced with the new JCL that assembles and link-edits the new subsystem parameters load module was not restored.	The name of the member with the new JCL	The backup name of the member that the stored procedure replaced with the new JCL	Rename the member with the specified backup object name (*object-backup-name*) JCL source library specified object name (*object-name*)
RESTORE	02	The member	The name of the	The backup	Rename the member

action-type value	*object-type* value	Description of the error	*object-name* value	*object-backup-name* value
		that the stored procedure replaced with the new subsystem parameters load module was not restored.	member with the new subsystem parameters load module	name of the member that the stored procedure replaced with the new subsystem parameters load module
RESTORE	03	The replaced active subsystem parameters load module in storage was not restored.	The name of the subsystem parameters load module in storage before the stored procedure issued the SET SYSPARM command with the LOAD option.	NA

Related reference

ADMIN_UPDATE_SYSPARM stored procedure (Db2 SQL)

-SET SYSPARM (Db2) (Db2 Commands)

DSNA686I ***csect-name* BIND QUERY FOR QUERYNO = *queryno-value* SUCCESSFUL, BUT SET_PLAN_HINT IS UNABLE TO RETRIEVE THE *information-type*. REASON: *reason-text***

Explanation

A BIND QUERY command issued by the SET_PLAN_HINT stored procedure has completed successfully. However, the SET_PLAN_HINT stored procedure cannot retrieve the BIND QUERY message or the QUERYID value.

csect-name
The name of the control section that issued the message.

queryno-value
The QUERYNO value that identifies the SQL statement.

reason-text
Text the describes why the message output for the BIND QUERY message was not be retrieved.

information-type
A string that indicates the type of information that was not retrieved:

- QUERY MESSAGE
- QUERYID

System action

The stored procedure performs terminates normally.

User response

No action is required.

Severity

0 (informational)

Related reference

SET_PLAN_HINT stored procedure (Db2 SQL)

BIND QUERY (DSN) (Db2 Commands)

DSNA687I ***csect-name* ADMIN_INFO_SQL OUTPUT IS INCOMPLETE DUE TO THE FOLLOWING MISSING EXPLAIN TABLES: *table-list***

Explanation

Stored procedure SYSPROC.ADMIN_INFO_SQL was issued to collect EXPLAIN output. One or more of the tables from which ADMIN_INFO_SQL gathers EXPLAIN output were missing. This might result in insufficient information for problem analysis.

csect-name
The name of the control section that issued the message.

table-list
A comma-separated list of the missing EXPLAIN tables.

System action

Processing continues. The EXPLAIN output that ADMIN_INFO_SQL collects is incomplete.

User response:

Define the missing tables, run EXPLAIN on the query, and call ADMIN_INFO_SQL to collect complete EXPLAIN output. See member DSNTESC in the *prefix*.SDSNSAMP data set for data definition statements for the EXPLAIN tables.

Related reference

ADMIN_INFO_SQL stored procedure (Db2 SQL)

DSNA690I ***csect-name*** **THE TASK** ***task-name*** **WAS RUNNING WHEN THE ADMIN SCHEDULER** ***scheduler-name*** **STOPPED**

Explanation

A task was executing when the specified administrative task scheduler was forced to stop. The status of this task is set to "unknown".

csect-name
The name of the control section that issued the message.

task-name
The unique name of the scheduled administrative task.

scheduler-name
The name of the administrative task scheduler.

System action

The administrative task scheduler recovers from a blocked state.

System programmer response

Avoid forcing the administrative task scheduler to stop when tasks are currently running. During a normal shutdown of the administrative task scheduler, make sure that no tasks are running.

For a JCL task, make sure that the JCL job, which is indicated in the JOBID in the task execution status, terminates before the next scheduled execution of this task. If the job is still running from a previous scheduled task, it must be stopped before the task runs again.

Severity

12 (severe error)

DSNA691I ***csect-name*** **THE ADMIN SCHEDULER** ***scheduler-name*** **CANNOT GENERATE A PASSTICKET FOR TASK** ***task-name*****, USER** ***user-name***

Explanation

The administrative task scheduler could not generate a PassTicket to switch the security environment. This PassTicket is required for the administrative task scheduler to be able to execute the specified task under the authority of the specified user.

csect-name
The name of the control section that issued the message.

scheduler-name
The name of the administrative task scheduler.

task-name
The unique name of the scheduled administrative task.

user-name
The user name that must execute the task. This user is not always indicated in the task, and could be the default ID, which is set in the DFLTUID parameter.

System action

The administrative task scheduler does not execute the specified task.

System programmer response

Check the security configuration and make sure that the administrative task scheduler is allowed to create PassTickets for any user.

Severity

12 (severe error)

Related tasks

Installation step 22: Set up the administrative task scheduler (Db2 Installation and Migration)

Related reference

Security guidelines for the administrative task scheduler (Db2 Administration Guide)

DSNA692I ***csect-name*** **THE ADMIN SCHEDULER** ***scheduler-name*** **CANNOT LOG IN AS USER** ***user-name*** **RC=***return-code* **RSN=***reason-code*

Explanation

The specified administrative task scheduler cannot switch the security environment in order to execute the specified task under the authority of the specified user.

csect-name
The name of the control section that issued the message.

scheduler-name
The name of the administrative task scheduler.

user-name
The user name that was indicated for the task.

task-name
The unique name of the scheduled administrative task.

return-code
The return-code returned by the z/OS UNIX System Services callable service pthread_security_np which was used to log in.

reason-code
The reason-code returned by the z/OS UNIX System Services callable service pthread_security_np which was used to log in.

System action

The administrative task scheduler does not execute the specified task.

System programmer response

Check the security configuration and make sure that the specified user exists and can log in.

Severity

12 (severe error)

Related reference

thread_security_np(), pthread_security_applid_np() -- Create or Delete Thread-level Security (C/C++ Run-Time Library Reference)

Return codes (errnos) z/OS UNIX System Services: Messages and Codes

Reason codes (errnojrs) z/OS UNIX System Services: Messages and Codes

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DSNA693I ***csect-name*** **THE ADMIN SCHEDULER** ***scheduler-name*** **CANNOT CONNECT TO DB2** ***db2-ssid*** **TO EXECUTE TASK** ***task-name***

Explanation

The specified administrative task scheduler was unable to connect to the specified Db2 subsystem when executing the specified stored procedure task.

csect-name
The name of the control section that issued the message.

scheduler-name
The name of the administrative task scheduler.

db2-ssid
The Db2 subsystem identifier.

task-name
The unique name of the scheduled administrative task.

System action

The administrative task scheduler does not execute the specified task.

Programmer response

Make sure that Db2 is up and running when the task is scheduled to run. Make sure that the user that is to execute the task is allowed to connect to Db2.

Severity

12 (severe error)

DSNA694I ***csect-name*** **THE ADMIN SCHEDULER** ***scheduler-name*** **CANNOT PROCESS PARAMETER PROCEDURE_INPUT OF TASK** ***task-name***

Explanation

The parameter PROCEDURE_INPUT for the specified task does not specify an SQL SELECT statement that returns one row of data.

csect-name
The name of the control section that issued the message.

scheduler-name
The name of the administrative task scheduler.

task-name
The unique name of the scheduled administrative task.

System action

The administrative task scheduler does not execute the specified task.

Programmer response

Remove the task and add it again.

Severity

12 (severe error)

Related reference

ADMIN_TASK_ADD stored procedure (Db2 SQL)

ADMIN_TASK_REMOVE stored procedure (Db2 SQL)

DSNA800I **DSNACA00 TCB=*x* ENTERED DSNACA00 ACTION=*x* R1=*x* CABPTR=*x* CABFLAG1=*x* CABFLAG2=*x***

Explanation

Messages in the DSNA800 series are intended for diagnosis and are documented in Interpreting trace messages (Diagnosing Db2 problems).

Related concepts

Interpreting trace messages (Diagnosing Db2 problems)

Chapter 2. DSNB messages

Message identifiers that begin with DSNB communicate information about the buffer manager.

DSNB200I **UPDATE VVDS FAILED. DSNAME = *dsn*, MMRC=*cccccccc* CONNECTION-ID=*xxxxxxxx*, CORRELATION-ID=*yyyyyyyyyyyy*, LUW-ID=*logical-unit-of-work-id* =*token***

Explanation

Db2 was unable to update the data set high-used RBA in the VSAM volume data set (VVDS) when it was ready to close a data set that was used by a RECOVER, LOAD, or REORG utility job. The error was detected by the media manager catalog update function that issues system message IEC161I. The *dsn* indicates the DSNAME of the data set. MMRC is the return code that Db2 received from the media manager catalog update service. Refer to *z/OS DFSMSdfp Diagnosis Reference* for a description of these codes.

The connection ID, correlation ID, and logical-unit-of-work ID (LUW-ID) identify the user or application that encountered the problem.

An LUW-ID of '*' indicates that the thread does not have an LUW-ID. If the LUW-ID is not an '*', the value is a logical-unit-of-work-id that is assigned to the thread followed by an '=' sign and a token value which can be used in place of logical-unit-of-work-id in any Db2 command that accepts logical-unit-of-work-id as input.

System action

Db2 continues closing this data set. However, the utility job is informed with a 00C2010C 'resource unavailable' reason code. The utility job is left in a failed state.

Operator response

Notify the system programmer.

System programmer response

To determine the cause of the error, refer to system message IEC161I in the appropriate MVS publication. Correct the error, and then notify the user to reinvoke the application.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- IDCAMS LISTCAT output for the ICF (VSAM) catalog that contains the Db2 subsystem catalog that defined the failing index or table.
- IDCAMS LISTCAT output that shows the attributes of all active log data sets for the Db2 member that failed.

DSNB204I **OPEN OF DATA SET FAILED. DSNAME = *dsn***

Explanation

A required data set of a Db2 table or index space could not be opened. The error was detected by the media manager CONNECT function that issues system message IEC161I. The *dsn* indicates the DSNAME of the data set.

After being issued for a given data set, this message is disabled for that data set.

System action

Buffer manager functions that detect this condition terminate.

Operator response

Notify the system programmer.

System programmer response

To determine the cause of the error, refer to system message IEC161I in the appropriate MVS publication. Correct the error, and reinvoke the application.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- IDCAMS LISTCAT output for the ICF (VSAM) catalog that contains the Db2 subsystem catalog that defined the failing index or table.
- VTOC listing of the disk volume on which the failing operation occurred.

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DSNB207I **DYNAMIC ALLOCATION OF DATA SET FAILED. REASON = *rrrr* DSNAME = *dsn***

Explanation

A required data set of a Db2 table or index space could not be allocated. Reason code *rrrr*, which is returned by dynamic allocation, indicates the reason for the failure. Refer to the appropriate version of the *MVS Authorized Assembler Services Guide* (SA22-7608) publication for a description of this reason code. The *dsn* indicates the data set's DSNAME.

After being issued for a given data set, this message is disabled for that data set.

System action

Buffer manager functions that detect this condition terminate and pass a unique error return code.

Operator response

Notify the system programmer.

System programmer response

Correct the situation, and then reinvoke the application.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- IDCAMS LISTCAT output for the ICF (VSAM) catalog that contains the Db2 subsystem catalog that defined the failing index or table.
- VTOC listing of the disk volume on which the failing operation occurred.

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DSNB209I ***csect-name*-BUFFER MANAGER TABLESPACE/INDEXSPACE CLEAN-UP ROUTINE (DSNB1CFC) HAS BEEN SCHEDULED FOR DBNAME = *database-name*, SPACENAME = *space-name* , INSTANCE*instance-number* , PSID = X'*psid*'**

Explanation

Db2 detected an abnormal condition for one of the following reasons:

- The associated table space or index space contains modified pages that cannot be written to DASD for a period of time that is longer than expected. This situation can be caused by either an unusually long period of continuous updates or by an internal logic error.
- An abnormal termination occurred because of inconsistent data or an incomplete update to the page.

Db2 scheduled the table space or index space cleanup routine (DSNB1CFC) for the associated table space or index space. DSNB1CFC acquires a drain lock to ensure that no updates are in progress. Data is inaccessible to users during the cleanup process.

For recoverable inconsistent pages with unbalanced write intents, Db2 initiates the recovery process and reconstructs the pages using the Db2 log. For other modified pages with unbalanced write intents, the buffer manager forces the pages to be written back to DASD and then makes the buffer space available for reassignment.

csect-name
The name of the control section that issued the message.

database-name
The name of the database that is associated with the action.

space-name
The name of the table space or index space that is associated with the action.

instance-number
The instance number of the table space or index space.

psid
The internal identifier for the table space or index space. This value is used to associate this message with the follow-on message DSNB221I, which might be issued.

System action

Db2 is ready to clean up the associated table space or index space. However, before any cleanup is initiated, Db2 requests a drain on the table space or index space. Db2 waits indefinitely for this drain. Therefore, all activities against the table space or index space, or both, must be quiesced before the cleanup process can proceed. After the cleanup process completes, the table space or index space is automatically made accessible to users.

User response

If the cleanup activity does not seem to finish,Db2 might still be waiting for a drain on the table space or index space. Issue a -DISPLAY DATABASE CLAIMERS command for the table space or index space in question to determine whether the cleanup routine is still waiting for a drain. If it is still waiting, identify the claimers of the table space or index space. If the jobs are holding claims for a very long duration (for example, they are waiting for input), you might need to cancel those jobs in order to allow the cleanup process to proceed.

Related reference

-DISPLAY DATABASE (Db2) (Db2 Commands)

Related information

DSNB221I

csect-name-BUFFER MANAGER TABLESPACE/ INDEXSPACE CLEAN-UP PROCESS WAS NOT REQUIRED FOR PSID = X'*psid*'

DSNB212I ***csect-name*-RECOVER PAGE STARTING DBNAME = *database-name*, SPACENAME = *space-name*, INSTANCE = *instance-number*, PAGE NUMBER = X'*page-number*'**

Explanation

The buffer manager subcomponent of Db2 discovered an inconsistent page with unbalanced write intents. Db2 is ready to do online recovery on the page by using the Db2 log.

csect-name
The name of the control section that issued the message.

database-name
The name of the database that is associated with the recovery.

space-name
The name of the table space or index space that is associated with the recovery.

instance-number
The instance number of the table space or index space.

page-number
A hexadecimal number that identifies the page that is logically inconsistent.

This message is followed by message DSNB215I if the recovery was successful or by message DSNB217I if it was not successful.

System action

Processing continues.

User response

No action is required.

Related information

DSNB215I

csect-name-ONLINE RECOVERY FOR AN INCONSISTENT PAGE HAS BEEN COMPLETED FOR DBNAME = *database-name*, SPACENAME = *space-name*, INSTANCE *instance-number*, PAGE NUMBER = X'*page-number*'

DSNB217I

csect-name-ONLINE RECOVERY FOR AN INCONSISTENT PAGE WAS UNSUCCESSFUL FOR DBNAME = *database-name* , SPACENAME = *space-name* , INSTANCE= *instance-number* , PAGE NUMBER = X'*page-number*'

DSNB215I ***csect-name*-ONLINE RECOVERY FOR AN INCONSISTENT PAGE HAS BEEN COMPLETED FOR DBNAME = *database-name*, SPACENAME = *space-name*, INSTANCE *instance-number*, PAGE NUMBER = X'*page-number*'**

Explanation

The recovery of an inconsistent page is complete.

csect-name
The name of the control section that issued the message.

database-name
The name of the database that is associated with the recovery.

space-name
The name of the table space or index space that is associated with the recovery.

instance-number
The instance number of the table space or index space.

page-number
A hexadecimal number that identifies the page that is logically inconsistent.

System action

Processing continues.

User response

No action is required.

Related information

DSNB212I

csect-name-RECOVER PAGE STARTING DBNAME = *database-name*, SPACENAME =

space-name, INSTANCE = *instance-number*, PAGE NUMBER = X'*page-number*'

DSNB217I ***csect-name*-ONLINE RECOVERY FOR AN INCONSISTENT PAGE WAS UNSUCCESSFUL FOR DBNAME = *database-name* , SPACENAME = *space-name* , INSTANCE= *instance-number* , PAGE NUMBER = X'*page-number*'**

Explanation

The recovery process for an inconsistent page failed. The page is written to disk as logically inconsistent. This message is issued in response to message DSNB212I, which was issued to indicate the start of the recovery process.

csect-name
The name of the control section that issued the message.

database-name
The name of the database that is associated with the recovery.

space-name
The name of the table space or index space that is associated with the recovery.

instance-number
The instance number of the table space or index space.

page-number
A hexadecimal number that identifies the page that is logically inconsistent.

System action

The page is marked as logically inconsistent and is unavailable until it is repaired. The execution unit driving this function proceeds normally.

This message is non-scrollable. It remains highlighted on the console until you take the appropriate action.

User response

If necessary, use the REPAIR utility to repair the page manually. If the problem persists, contact IBM Support

Problem determination

Message DSNI012I might be issued before this message to indicate the same failure. If so, a 00C90102 abend dump might help determine the cause of this failure. Otherwise, see SYS1.LOGREC for any abend that occurred between the associated DSNB212I message and this message. Use the timestamp on the log records to find this abend.

Related reference

REPAIR (Db2 Utilities)

Related information

DSNB212I
csect-name-RECOVER PAGE STARTING DBNAME = *database-name*, SPACENAME = *space-name*, INSTANCE = *instance-number*, PAGE NUMBER = X'*page-number*'

DSNI012I
PAGE LOGICALLY BROKEN TYPE *resource-type* NAME *resource-name* MODNAME *modname* ERQUAL *erqual*

00C90102 (Db2 Codes)

DSNB219I ***csect-name*-BUFFER MANAGER TABLESPACE/INDEXSPACE CLEAN-UP PROCESS HAS BEEN COMPLETED FOR DBNAME = *database-name*, SPACENAME = *space-name*, INSTANCE *instance-number***

Explanation

The buffer manager table space or index space cleanup process has completed for the associated table space or index space. Message DSNB209I, if present, provides additional information about why the buffer manager scheduled the table space or index space cleanup process.

csect-name
The name of the control section that issued the message.

database-name
The name of the database that is associated with the action.

space-name
The name of the table space or index space that is associated with the action.

instance-number
The instance number of the table space or index space.

System action

Processing continues.

User response

No action is required.

Related information

DSNB209I

csect-name-BUFFER MANAGER TABLESPACE/ INDEXSPACE CLEAN-UP ROUTINE (DSNB1CFC) HAS BEEN SCHEDULED FOR DBNAME = *database-name*, SPACENAME = *space-name* , INSTANCE*instance-number* , PSID = X'*psid*'

DSNB221I ***csect-name*-BUFFER MANAGER TABLESPACE/INDEXSPACE CLEAN-UP PROCESS WAS NOT REQUIRED FOR PSID = X'*psid*'**

Explanation

This message indicates that the buffer manager (BM) table space or index space cleanup process was bypassed for the associated table space or index space. After quiescing all other activities against the table space or index space, the buffer manager discovered that the table space or index space is no longer in active mode; that is, it was closed.

The abnormal condition detected earlier was resolved by buffer manager close page set processing. Refer to the corresponding message, DSNB209I, using *psid* as the matching field, for the reasons the buffer manager schedules the table space or index space cleanup process. The *psid* is the internal identifier for the associated table space or index space.

System action

Processing continues.

DSNB223I ***csect-name*-BUFFER MANAGER TABLESPACE/INDEXSPACE CLEANUP PROCESS WAS SKIPPED FOR PSID = X'*psid*'**

Explanation

This message indicates that the table space or index space cleanup process was bypassed for the associated table space or index space. During the process of quiescing all other activities against the table space or index space, an error that is not recoverable was detected. The error might be caused by any of the following conditions:

- An out-of-storage condition was detected by IRLM.
- The table space or index space was dropped because of a backout.

It is assumed that the abnormal condition detected earlier can later be resolved by the close page set processing. Refer to the corresponding message DSNB209I (use *psid* as the matching field) for the reasons for scheduling the table space or index space cleanup process. The *psid* specifies the internal identifier for the associated table space or index space.

System action

Processing continues.

System programmer response

The associated table space or index space might contain inconsistent data. Issue the Db2 STOP TABLESPACE or INDEXSPACE command to allow close page set processing to perform cleanup for the associated table space or index space.

DSNB224I ***csect-name*- BUFFER MANAGER I/O ERROR DURING *function*, DSNAME = *data-set-name* , PAGE NUMBER=X'*page-number*', MM ERROR FLAG=X'*aa*', CSW STATUS=X'*bbbb*', SENSE BYTES=X'*cccc*', SEEK ADDRESS=X'*dddddddddddddddd*'**

Explanation

An I/O error was encountered by the buffer manager (BM) subcomponent of Db2.

csect-name
The name of the control section that issued the message.

function
The function that was being performed when the error occurred. Possible values are READ, WRITE, or FORMAT.

data-set-name
The name of the data set on which the I/O operation was being performed.

page-number
The page number, in hexadecimal format, of the page on which the I/O operation was being performed.

aa*, *bbbb*, *cccc*, and *dddddddddddddddd
Error information that is returned by the media manager and used for error analysis by IBM Software Support.

System action

The system action depends on the value of *function*. In most cases, Db2 returns a message that indicates that a resource is unavailable with a reason code that identifies the problem. However, in the following cases, the I/O-error page range of the data set is updated and message DSNU086I is issued:

- *function* is WRITE
- *function* is READ and the I/O operation was performed during a restart or rollback operation.

After being issued 10 times for a given data set, this message is disabled for that data set until the data set is closed and reopened.

Operator response

Notify the system programmer.

System programmer response

See the information for the reason code that is returned in the SQLCA or in the utility messages and take the specified action.

If you suspect an error in Db2, see the information about collecting data.

Problem determination

See the information about problem determination for the reason code that is returned in the SQLCA or in the utility messages.

Check the MVS console log for an IOS (I/O subsystem) error message that indicates the type of I/O error that occurred. If an IOS message was issued, follow the problem determination directions for that message.

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

.

Related concepts

Db2 reason codes (Db2 Codes)

Related tasks

Collecting diagnostic data (Collecting data)

Related information

DSNU086I

csect-name ttttt I/O ERRORS ON SPACE= *dddddddd*. DATA SET NUMBER= *nnn*. I/O ERROR PAGE RANGE= *aaaaaa, bbbbbb*.

DSNB225I ***csect-name*- BUFFER MANAGER I/O ERROR DURING *function*, DSNAME = *data-set-name* , MM ERROR CODES=X'*aaaaaaaa*' DB2 REASON CODE=X'*reason-code*'**

Explanation

Db2 encountered an I/O error.

csect-name
The name of the control section that issued the message.

function
The function that was being performed when the error occurred. Possible values are READ, WRITE, CASTOUT, or FORMAT.

data-set-name
The name of the data set on which the I/O operation was being performed.

aaaaaaaa
Error information that is returned by the media manager at the time of the failure. This information used for error analysis by IBM Support.

reason-code
The Db2 reason code value that indicates the reason for the failure. For explanations of reason codes, see Db2 reason codes (Db2 Codes).

System action

Except for a castout error, the application terminates with abend X'04E' and reason code 00C200A4 or 00C200C0. If an error occurs during a castout operation, processing continues.

Operator response

Notify the system programmer.

See the information for the given reason code and take the specified action.

System programmer response

If you suspect an error in Db2, see the information about collecting data.

Problem determination

Check the MVS console log for an IOS (I/O subsystem) error message that indicates the type of I/O error that occurred. If an IOS message was issued, follow the problem determination directions for that message.

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- IDCAMS LISTCAT output for the ICF (VSAM) catalog that contains the Db2 subsystem catalog that defined the failing index or table.
- VTOC listing of the disk volume on which the failing operation occurred.

.

Related concepts
Db2 reason codes (Db2 Codes)
Related tasks
Collecting diagnostic data (Collecting data)
Related information
00C200A4 (Db2 Codes)
00C200C0 (Db2 Codes)

DSNB226I ***csect-name*** **- BUFFER MANAGER PAGE GET ROUTINE DETECTED AN INVALID PAGE IN DBNAME=*database-name*, SPACENAME=*space-name* , INSTANCE=*instance-number*, DATA SET NUMBER= *data-set-number*, PAGE EXPECTED=X'*expected page-number*', PAGE NUMBER FOUND=X'*page-number*'**

Explanation

An unexpected page was received during buffer manager (BM) get page processing.

csect-name
The name of the control section that issued the message.

database-name
The name of the database that contains the involved page set.

space-name
The name of the table space or index space for the involved page set.

instance-number
The instance number of the table space or index space.

data-set-number
The data set number for the involved page set.

expected page-number
The page number of the page in error. The buffer manager expected to find this page in the buffer.

page-number
The page number of the page that was found in the buffer instead of the expected page.

System action

The application is terminated with abend X'04E' and reason code 00C200F7.

Operator response

Notify the system programmer.

See the information for the given reason code and take the specified action.

System programmer response

If you suspect an error in Db2, see the information about collecting data.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- IDCAMS LISTCAT output for the ICF (VSAM) catalog that contains the Db2 subsystem catalog that defined the failing index or table.
- VTOC listing of the disk volume on which the failing operation occurred.
- DSN1COPY-generated copy of the table and index, taken before any recovery is performed.

.

Related concepts
Db2 reason codes (Db2 Codes)
Related tasks
Collecting diagnostic data (Collecting data)
Related information
00C200F7 (Db2 Codes)

DSNB227I ***csect-name*** **- DFHSM RECALL FAILED FOR DSNAME=*dataset-name* HSMRC=*return-code* HSMRSN=*reason-code***

Explanation

The attempt to recall a migrated data set failed.

csect-name
The name of the control section that issued the message.

dataset-name
The name of the data set.

return-code
The return code issued by DFSMShsm. This value corresponds to a similarly numbered MVS ARC message:

```
ARC11 + return-code + I
```

reason-code
The reason code issued by DFSMShsm.

System action

A "resource not available" code is returned.

Operator response

Notify the system programmer.

System programmer response

Use the information provided in message DSNB227I to determine the reason for the DFSMShsm recall failure.

Related concepts

RECALL command (z/OS DFSMShsm Storage Administration Reference)

Related reference

ARC messages (MVS System Messages)

Related information

Return codes from DFSMShsm commands (DFSMShsm Managing Your Own Data)

DSNB228I ***csect-name*** **GROUP BUFFER POOL** ***gbpname*** **CANNOT BE ACCESSED FOR** ***function*** **MVS IXLCACHE REASON CODE=***reason*

Explanation

While accessing group buffer pool *gbpname* for function *function* Db2 received an error from the MVS IXLCACHE request.

function
READ or WRITE

reason
Reason code from the MVS IXLCACHE request

System action

The system action depends on the function being performed. If the function is a WRITE, or a READ performed during rollback or Db2 restart, the page is added to the logical page list (LPL) for the data set and message DSNB250E is issued. Otherwise, 'resource unavailable' is returned to the user with a reason code that identifies the specific problem.

System programmer response

See *MVS/ESA Programming: Sysplex Services Reference* for an explanation of the MVS IXLCACHE reason code.

DSNB229I ***csect-name*** **UNEXPECTED ERROR WHEN CHECKING FOR REQUEST COMPLETION FOR GROUP BUFFER POOL** ***gbp-name*** **MVS IXLFCOMP REASON CODE=***reason*

Explanation

Db2 received an unexpected error from MVS when checking for the completion of a write request to the secondary group buffer pool for duplexing. *gbp-name* indicates the name of the group buffer pool. If the group buffer pool is duplexed and the error was encountered on a request to the secondary group buffer pool, then *gbp-name* indicates the name of the group buffer pool suffixed with '-SEC'.

reason is the reason code from the MVS IXLFCOMP service.

System action

Db2 returns the group buffer pool back to simplex mode. The secondary group buffer pool is deallocated.

System programmer response

See *MVS/ESA Programming: Sysplex Services Reference* for an explanation of the MVS IXLFCOMP reason code.

DSNB232I ***csect-name*** **- UNEXPECTED DATA SET LEVEL ID ENCOUNTERED - LEVEL ID =***lvlid* **EXPECTED LEVEL ID=***xlvlid* **DSN=***dsn*

Explanation

A required data set of a Db2 table space could not be opened. Db2 encountered an unexpected data set level ID.

lvlid
The unexpected level ID from the data set. If Db2 was unable to retrieve the level ID from the data set (for example, if the data set had been deleted and redefined), the level ID is shown as "X'"'.

xlvlid
The level ID recorded by Db2 previously and is the expected level ID for opening the data set

dsn
The DSNAME of the data set.

This problem could be the result of data sets that were restored to a level that is inconsistent with other data sets, inconsistent with the Db2 log, or both.

System action

Db2 sends back a 'resource unavailable' SQL code to the application and a reason code explaining the error.

Operator response

Notify the system programmer.

System programmer response

To enable access to a data set reported as down level, take one of the following actions:

- Restore the page set or partition to the proper level (use DSN1COPY, DFHSM, or another tool).

  Identify the level ID of a copy of the page set or partition by running the DSN1PRNT(FORMAT) utility. The level ID is found in the header page of the page set or partition.
- Recover the down level page set or partition to currency by running the RECOVER or RECOVER LOGONLY utility.
- Accept the down levelling by running the REPAIR utility with the LEVELID option.

  This option is only valid if Db2 is able to access the level ID (*lvlid* is not "X'"').

  Inconsistent data problems might result from this action and are the user's responsibility.
- Replace the contents of the page set or partition using the LOAD REPLACE utility.
- Explicitly restore the page set to a prior point in time with the RECOVER utility.

If the expected level ID is less than the encountered level ID, it is possible that the object identified in the message was ported from another system improperly or it might indicate that DSNDB01.SYSLGRNX is down level. If the problem is in the object identified in the message, the actions listed above can be used to allow access to the data. If the problem is in SYSLGRNX, this is a serious situation that compromises the recoverability of all objects managed by Db2. Investigate whether SYSLGRNX might have inadvertently been restored to a point in time inconsistent with the rest of the Db2 system.

DSNB233I ***csect-name*** **DBNAME** ***database-name*** **SPACENAME** ***space-name*** **INSTANCE** ***instance-number*** **PARTITION** ***partition-number*** **IS IN BASIC PAGE FORMAT AND SHOULD BE CONVERTED TO EXTENDED PAGE FORMAT**

Explanation

This message is issued upon a physical open of a table space or index. The specified partition is still in the basic LRSN format and makes Db2 susceptible to outages if this 6-byte limit is exceeded. It is strongly recommended to convert it to the extended LRSN format to prevent the 6-byte limit being exceeded.

csect-name
The name of the control section that issued the message.

database-name
The database name.

space-name
The name of the table space or index space.

intance-number
The instance number.

partition-number
The partition number that remains in 6-byte format.

System action

Processing continues. This message is shown as many as 20 times each time that Db2 is started, and it is not shown when utilities open the page sets. Absence of this message does not imply all table spaces have been converted, but rather no table spaces have been opened in the 6-byte format.

System programmer response

Run the REORG or REBUILD utility to convert the table space or index to 10-byte LRSN format, as described in Converting page sets to the 10-byte RBA or LRSN format (Db2 Administration Guide).

User response

Notify the system programmer.

Severity

0 (informational)

Related concepts

The extended 10-byte RBA and LRSN in Db2 11 (Db2 for z/OS What's New?)

Related tasks

What to do before RBA or LRSN limits are reached (Db2 Administration Guide)

DSNB235A ***csect-name*** **- GRS RESOURCE SHORTAGE DETECTED BY DB2**

Explanation

A z/OS Global Resource Serialization (GRS) resource shortage was detected when Db2 opened or closed a data set.

csect-name
The name of the control section that issued the message.

System action

To relieve the GRS resource shortage, Db2 might close data sets that have not been used recently.

This message is non-scrollable. It remains highlighted on the console until you take the appropriate action.

Message DSNB235A is deleted when Db2 detects that the GRS resource shortage has been relieved.

System programmer response

Work with your Db2 administrator to reduce the Db2 workload, or reduce the number of open data sets.

Problem determination

GRS message ISG353E might be displayed when the resource shortage occurs. This message identifies the specific storage area that has a shortage.

GRS message ISG354I displays when the resource shortage has been relieved.

Related reference

Message ISG353E (MVS System Messages)
Message ISG354I (MVS System Messages)

DSNB250E ***csect-name* A PAGE RANGE WAS ADDED TO THE LOGICAL PAGE LIST. DATABASE NAME=*database-name*, SPACE NAME=*space-name*, INSTANCE=*instance-number*, DATA SET NUMBER=*data-set-number*, PAGE RANGE X'*low-page*' TO X'*high-page*', START LRSN=X'*start-lrsn*', END LRSN=X'*end-lrsn*', START RBA=X'*start-rba*', LPL TRACE ID=*trace-id*, LPL REASON TYPE=*reason-type***

Explanation

DB2 added a page range to the logical page list (LPL) for the specified data set, because the pages in the page range had a problem.

csect-name
The name of the control section that issued the message.

database-name
The name of the database.

space-name
The name of the table space or index space that is associated with the action.

instance-number
The instance number of the table space or index space.

data-set-number
The data set number.

low-page* and *high-page
The range of pages that was added to the LPL. The values are hexadecimal page numbers.

start-lrsn* and *end-lrsn
The log range that is needed to recover the pages in the page range. These values are RBA values unless DB2 is in a data sharing environment. In that case, these values are LRSN values. A zero value for *end-lrsn* refers to the current end of the recovery log.

start-rba
In a data sharing environment, the starting RBA value of the recovery log range if the value is not zero. The *start-rba* value applies to log records for only the DB2 member that issued the message.

trace-id
A value that is used for serviceability by IBM Support.

reason-type
The reason why the pages were added to the LPL. *reason-type* can contain one of the following values:

DASD
Db2 encountered a DASD I/O error when trying to read or write pages on DASD.

LOGAPPLY
Db2 cannot apply log records to the pages.

GBP
Db2 cannot successfully read from or externalize the pages to the group buffer pool. This problem occurred for one of the following reasons:

- a link or structure failure
- the group buffer pool is in rebuild status
- the group buffer pool was disconnected

LOCK
DB2 cannot get the required page latch or page P-lock on the pages.

CASTOUT
The Db2 castout processor cannot successfully cast out the pages.

NOTLOGGD
Work on an object needs to be undone. However, the work was not logged, because the object has the NOT LOGGED attribute.

System action

The pages are added to the LPL

For any *reason-type* value other than NOTLOGGD, Db2 initiates the automatic LPL recovery. The pages remain inaccessible until they are recovered.

If you attempt to access a page in the LPL, Db2 returns SQLCODE -904 with reason code 00C20206.

If MVS detects a problem when accessing the group buffer pool, DB2 writes a SYS1.LOGREC entry that describes the error.

System programmer response

Take the appropriate actions for the *reason-type* value based on the console message.

To recover pages from the LPL, perform one of the following actions:

- For a *reason-type* value other than NOTLOGGD, issue the START DATABASE command with the SPACENAM option.
- Run the RECOVER utility
- Run the LOAD utility

Related reference

-START DATABASE (Db2) (Db2 Commands)
RECOVER (Db2 Utilities)
LOAD (Db2 Utilities)

Related information

-904 (Db2 Codes)
00C20206 (Db2 Codes)

DSNB260I ***csect-name*** **WARNING - A READER HAS BEEN RUNNING FOR** ***duration*** **MINUTES - CORRELATION NAME=*correlation-name*, CONNECTION ID=*connection-id*, LUWID=*luwid* ID=*token*, PLAN NAME=*plan-name*, AUTHID=*authorization-id*, END USER ID=*user-id*, TRANSACTION NAME=*transaction-name*, WORKSTATION NAME=*system-name***

Explanation

One of the following situations occurred:

- A long-running reader reached the maximum permitted time without issuing either a COMMIT or ROLLBACK statement.
- A reader that was claimed by cursors that were defined WITH HOLD was held longer than the number of minutes that an agent can hold a read claim.

csect-name
The name of the control section that issued the message.

duration
The time, in minutes, that has elapsed since the beginning of the unit of work.

correlation-name
The correlation name that is associated with the unit of work.

connection-id
The connection ID that is associated with the unit of work.

luwid
The logical unit of work ID, or an asterisk (*) to denote that the thread originated at the local site.

token
A unique token number that is associated with the logical unit of work ID.

plan-name
The plan that is associated with the unit of work.

authorization-id
The authorization ID that is associated with the unit of work.

user-id
The user ID that is associated with the unit of work, if known. Otherwise, an asterisk (*).

transaction-name
The transaction that is associated with the unit of work, if known. Otherwise, an asterisk (*).

system-name
The workstation host name that is associated with the unit of work, if known. Otherwise, an asterisk (*).

The amount of time that is permitted for a reader is controlled by the LRDRTHLD subsystem parameter.

System action

Processing continues.

If IFCID 0313 trace is activated, an IFCID 0313 trace record is written. This message is issued every time that the threshold is reached.

System programmer response

Work with the application programmer to determine if there is a problem with the unit of work. If an application program caused the unit of work to reach its time limit threshold, you can use CANCEL THREAD to cancel the associated thread.

Administrator response

Increase the value of subsystem parameter LRDRTHLD so that this message is issued less frequently.

Programmer response

Make sure that the application commits at appropriate intervals, or work with the Db2 administrator to determine an appropriate frequency for the COMMIT check.

Related concepts

Commit and rollback of transactions (Introduction to Db2 for z/OS)

Related reference

LONG-RUNNING READER field (LRDRTHLD subsystem parameter) (Db2 Installation and Migration)

-CANCEL THREAD (Db2) (Db2 Commands)

COMMIT (Db2 SQL)

ROLLBACK (Db2 SQL)

DSNB301E *csect-name* GROUP BUFFER POOL *gbp-name* CANNOT BE CONNECTED DB2 REASON CODE = *reason-code* MVS IXLCONN REASON CODE = *ixlconn-reason*

Explanation

Db2 was not able to connect to the named group buffer pool. This message is generally issued once for each Db2 subsystem for each Db2 reason code, except 00C20204, until the failure condition is corrected.

csect-name
The name of the control section that issued the message.

gbp-name
The name of the group buffer pool.

reason-code
The Db2 reason code.

For Db2 reason code 00C20204, which indicates a problem during MVS IXLCONN processing, the DSNB301E message is issued once for each Db2 subsystem for each IXLCONN reason code until the failure condition is corrected.

ixlconn-reason
When the Db2 reason code is 00C20204, the MVS IXLCONN reason code. For all other Db2 reason code values, *ixlconn-reason* contains zeros.

System action

If the connection was requested on behalf of an access request by an SQL user on this Db2, SQLCODE -904 (resource unavailable) is returned to the SQL user with the Db2 reason code shown in this message.

If the connection was requested on behalf of an SQL user on another Db2 in the data sharing group, SQLCODE -904 (resource unavailable) is returned to the SQL user with Db2 reason code 00C20252. This indicates that the requested table space or index space is unavailable because another Db2 cannot connect to the group buffer pool.

If the MVS IXLCONN reason code is *xxxx*0C08 (structure allocation failed because there was no suitable facility to allocate based on the preference list in the MVS CFRM administrative policy), or if the MVS IXLCONN reason code is *xxxx*084C (user does not have proper Security Access Facility (SAF) authorization), then IFCID 0250, if active, contains additional diagnostic information.

System programmer response

See the specified Db2 reason code for information about appropriate actions.

Related reference

Return and Reason Codes

Related information

-904 (Db2 Codes)

00C20204 (Db2 Codes)

00C20252 (Db2 Codes)

00C202A8 (Db2 Codes)

DSNB302I *csect-name* GROUP BUFFER POOL *gbpname* IS ALLOCATED IN A VOLATILE STRUCTURE

Explanation

The Db2 group buffer pool structure is volatile.

One Db2 member issues this message whenever the structure has the volatile attribute. Db2 detects this either on the first connection to the group buffer pool or when the attribute changes later. Db2 always requests nonvolatile group buffer pools but allows allocation in a volatile structure if that is all that is available.

System action

Db2 processing continues.

System programmer response

To cause the group buffer pools to be allocated in nonvolatile coupling facilities, ensure that:

- At least a subset of your coupling facilities are configured correctly for nonvolatility.
- The MVS CFRM policy correctly specifies the nonvolatile coupling facilities in the preference list for the group buffer pool coupling facility structures.

Even when these things are correctly done, there might be instances when a suitable coupling facility in the preference list cannot be found (for example, not enough free space), and therefore allocation occurs in a different coupling facility. MVS tries to allocate the structure in the facility that best meets the structure allocation request as follows:

1st choice:
Coupling facility that meets the volatility requirement, the space requirement, and the exclusion list requirement.

2nd choice:
Coupling facility that meets the volatility requirement and the storage requirement.

3rd choice:
Coupling facility that has the best fit (most available free space) even though this might be less than the amount requested.

4th choice:
Structure cannot be allocated.

IFCID 0250, if activated, contains a list of the coupling facilities on which allocation was attempted.

DSNB303E ***csect-name*** **A LOSS OF CONNECTIVITY WAS DETECTED TO GROUP BUFFER POOL** ***gpbname***

Explanation

Connectivity to group buffer pool *gpbname* was lost.

System action

Db2 disconnects from the coupling facility structure with REASON=FAILURE.

The action taken in response to this problem depends on the attempted function, as follows:

- For a coupling facility read: SQLCODE -904 (resource unavailable) is returned to the SQL user with a reason code indicating the specific error.
- For a coupling facility read during rollback, backout, or restart: The inaccessible page is added to the logical page list (LPL) for the page set. Message DSNB250E is issued for the first page of each data set added to the LPL.
- For a coupling facility read during castout: The castout operation cannot complete.
- For a coupling facility write: The changed page is added to the LPL for the page set.

DSNB304I ***csect-name*** **GROUP BUFFER POOL** ***gbpname*** **WAS SET TO 'DAMAGE ASSESSMENT PENDING' STATUS**

Explanation

A coupling facility structure for a group buffer pool was damaged.

System action

- Db2 puts the group buffer pool into 'damage assessment pending' (DAP) status. Message DSNB304I indicates the DAP status. The group buffer pool cannot be accessed until DAP status is cleared.
- The Db2 damage assessment process determines which table spaces and index spaces are using the failed group buffer pool and puts those spaces into 'group buffer pool recovery pending' (GRECP) status.
- After Db2 sets all the necessary spaces to GRECP status, the DAP status for the group buffer pool is cleared. Message DSNB305I indicates that DAP status is cleared.

DSNB305I ***csect-name*** **'DAMAGE ASSESSMENT PENDING' STATUS WAS CLEARED FOR GROUP BUFFER POOL** ***gbpname***

Explanation

Damage assessment completed and the 'damage assessment pending' (DAP) status is cleared for the group buffer pool (GBP). At this point, the group buffer pool status is no longer restricted and Db2 attempts to reconnect to the group buffer pool on the next reference to a GBP-dependent page set within the associated buffer pool.

Message DSNB304I precedes this message.

DSNB306I ***csect-name*** **THE REQUESTED LENGTH OF THE LOCAL CACHE VECTOR COULD NOT BE ALLOCATED FOR GROUP BUFFER POOL** ***gbpname*** **REQUESTED LENGTH =** ***length1*** **ALLOCATED LENGTH =** ***length2***

Explanation

Db2 connected to the group buffer pool indicated by *gbpname*, but the MVS Cross-system Extended

Services (XES) component could not allocate the requested size of the local cache vector (LCV) in the hardware system area (HSA). Db2 requires an LCV size that is large enough to handle all pages in the member's buffer pool.

length1 indicates the LCV size (in number of bits) that Db2 requested. *length2* indicates the LCV size (in number of bits) that XES was able to allocate.

To prevent flooding the operator console, this message is only issued once per Db2 member per group buffer pool until the condition is corrected.

System action

Db2 disconnects from the GBP and issues message DSNB301E with reason code 00C20208, if it has not yet been issued.

SQLCODE -904 is returned to the user with a reason code of 00C20208.

System programmer response

There is not enough HSA storage on the processor to support the size of the local cache vector. The details of HSA allocation are machine-dependent and are defined by the hardware. To correct this problem, take one or both of the following actions:

- Consult the documentation for your processor hardware to determine if the HSA storage allocation can be increased, and if so, how to do it.
- Modify the software configuration in your parallel sysplex to reduce the number or size of the vectors that are in use by other coupling facility structure users. Consider the following possible solutions:
  - Use the Db2 ALTER BUFFERPOOL command to reduce the size of this local buffer pool. This means that you might have to reduce the size of the virtual pool.
  - Use the Db2 ALTER BUFFERPOOL command to reduce the size of another local buffer pool that is already connected to a group buffer pool. This means that you might have to reduce the size of the virtual pool. If you make a connected buffer pool smaller, Db2 can usually contract the size of the corresponding LCV dynamically, making HSA storage available. However, Db2 cannot always do the dynamic LCV contraction. In cases where Db2 cannot dynamically contract the LCV size, you can use the Db2 ALTER BUFFERPOOL command to either force a deallocation of the LCV or to force a contraction of the LCV as follows:
    1. Redefine the virtual pool to be smaller than the original size.
    2. Take one of the following actions:
       a. Make the virtual pool very small (perhaps 50 pages or less). Making the virtual pool sufficiently small should let Db2 dynamically contract the LCV, or
       b. Delete the virtual pool to let Db2 disconnect from the group buffer pool. This frees the entire LCV associated with that member's connection to that group buffer pool.
  - Consolidate your group buffer pool-dependent page sets into fewer buffer pools to reduce the number of group buffer pool connections.
  - Consult the documentation for the other software components that might be using a coupling facility cache or list structure with an associated LCV to determine whether it is possible to either delete the connection or to reduce the size of the LCV associated with the connection.

DSNB307I ***csect-name*** **GROUP BUFFER POOL** ***gbpname*** **WAS SUCCESSFULLY ALLOCATED BUT THE EXCLUSION LIST WAS NOT HONORED**

Explanation

Db2 successfully connected to the group buffer pool and allocated the group buffer pool in a coupling facility. However, the group buffer pool was allocated in a coupling facility containing a structure in the exclusion list.

System programmer response

If you require that the exclusion list be honored, you must ensure that there is sufficient space in the coupling facilities that are not in the exclusion list. IFCID 0250 provides information about which facilities were attempted.

DSNB308I ***csect-name*** **GROUP BUFFER POOL** ***gbpname*** **WAS SUCCESSFULLY ALLOCATED BUT THE ALLOCATED SIZE OF** ***alloc_size*** **IS LESS THAN THE REQUESTED SIZE OF** ***req_size***

Explanation

Db2 successfully connected to the group buffer pool and allocated the group buffer pool in a coupling facility. However, the allocated size of the group buffer pool was less than the requested size in the MVS CFRM administrative policy because there is not enough space in the preference list facilities. Both *alloc_size* and *req_size* are in 4KB blocks.

System programmer response

IFCID 0250 provides information about which coupling facilities were used for attempted allocation.

DSNB309I ***csect-name*** **GROUP BUFFER POOL** ***gbpname*** **HAS BEEN DISCONNECTED WITH A REASON OF '*reason*'**

Explanation

Db2 disconnected from the named group buffer pool.

reason indicates one of the following values:

NORMAL
Db2 disconnected the group buffer pool normally. MVS deletes the connection.

FAILURE
Db2 disconnected the group buffer pool abnormally. MVS puts the connection into a 'failed-persistent' state. Db2 disconnects the GBP with a reason of FAILURE when some type of error has been detected, and castout processing cannot proceed. Usually the error involves a connectivity failure to either the coupling facility or DASD. This message is preceded by message DSNB303E, and probably a series of DSNB311I and DSNB312I messages.

If this message is issued because connectivity was lost to the group buffer pool, this message signifies that this Db2 member has completed its processing of the error.

System programmer response

See the system programmer response for message DSNB311I or DSNB312I.

DSNB310I ***csect-name*** **GROUP BUFFER POOL** ***gbpname*** **IS ALLOCATED IN A NONVOLATILE STRUCTURE**

Explanation

The coupling facility storage in which the group buffer pool is allocated was previously volatile, but is now nonvolatile. For availability reasons, we recommend that Db2 group buffer pools be allocated in nonvolatile coupling facility storage. When Db2 connects a group buffer pool, it requests that the backing coupling facility structure be allocated in nonvolatile storage. If the request for nonvolatile storage is not honored, Db2 issues message DSNB302I.

System action

Db2 processing continues.

DSNB311I ***csect-name*** **DBNAME** ***database-name*** **SPACENAME** ***space-name*** **INSTANCE** ***instance-number*** **HAS PAGES IN THE LOGICAL PAGE LIST**

Explanation

This message is issued after a loss of connectivity to a group buffer pool is detected. The named table space or index space has one or more pages in the logical page list (LPL) that need to be recovered. This message is issued after Db2 has completed its processing for the table space or index space; this point is the earliest point at which you can recover LPL pages for that table space or index.

csect-name
The name of the control section that issued the message.

database-name
The name of the database that is associated with the recovery.

space-name
The name of the table space or index space that is associated with the recovery.

instance-number
The instance number of the table space or index space.

System action

The pages in the LPL are not accessible until they have been recovered.

System programmer response

Issue the START DATABASE command with the named table space or index to recover the LPL pages. You must issue the START DATABASE command from a Db2 member that can connect to the group buffer pool. Alternatively, you can use the RECOVER utility or the LOAD utility to recover the LPL pages.

Related reference
-START DATABASE (Db2) (Db2 Commands)
RECOVER (Db2 Utilities)
LOAD (Db2 Utilities)

DSNB312I ***csect-name*** **DBNAME** ***database-name*** **SPACENAME** ***space-name*** **INSTANCE** ***instance-number*** **PARTITION** ***partition-number*** **HAS PAGES IN THE LOGICAL PAGE LIST**

Explanation

This message is issued after a loss of connectivity to a group buffer pool is detected. A partition of the named table space or index has one or more pages in the logical page list (LPL) that need to be recovered. This message is issued after Db2 has completed its processing for the partition; this point is the earliest point at which you can recover the LPL pages for that partition.

csect-name
The name of the control section that issued the message.

database-name
The name of the database that is associated with the recovery.

space-name
The name of the table space or index space that is associated with the recovery.

instance-number
The instance number of the table space or index space.

partition-number
The partition number.

System action

The pages in the LPL are not accessible until they have been recovered.

System programmer response

Issue the START DATABASE command on the table space or index space partition to recover the LPL pages. You must issue the START DATABASE command from a Db2 member that can connect to the group buffer pool. Alternatively, you can use the RECOVER utility or the LOAD utility to recover the LPL pages.

Related reference
-START DATABASE (Db2) (Db2 Commands)
RECOVER (Db2 Utilities)
LOAD (Db2 Utilities)

DSNB313I ***csect-name* GROUP BUFFER POOL *gpbname* TO BE DISCONNECTED REASON=*reason* LOSSCONN PERCENTAGE=*percentage***

Explanation

This Db2 member is disconnecting from group buffer pool *gpbname* because it has lost connectivity to the coupling facility in which the group buffer pool is allocated.

reason is one of the following:

NOSFMPOL
MVS cannot determine the scope of the loss of connectivity because there is no active SFM policy with CONNFAIL(YES).

LOSSCONN
MVS determined that the scope of the loss of connectivity was less than 100%.

NOXESEVL
MVS started to try to determine the scope of the loss of connectivity, but some condition occurred which prevented MVS from being able to complete the evaluation. One example of such a condition would be that the SFM policy became inactive while MVS was trying to do the evaluation.

If *reason* is LOSSCONN, then *percentage* indicates the percentage of lost connectivity that was calculated by MVS. MVS evaluates the scope of the loss of connectivity in terms of SFM weights associated with the systems which have lost connectivity and which have active connectors to the coupling facility structure (if there are systems that do not have an active connector to the coupling facility structure, then those systems are not factored into the "percentage loss of connectivity" calculation).

If *reason* is not LOSSCONN, then *percentage* is not applicable (it should appear as zero).

System action

The Db2 member disconnects the group buffer pool, putting its connection into a "failed-persistent" state.

If there are transactions that are in progress at the time of the connectivity failure, Db2 might need to add pages to the logical page list (LPL).

System programmer response

Use the START DATABASE command to recover the LPL pages. If DSNDB01 or DSNDB06 objects have LPL pages, you might need to recover these first, before proceeding with LPL recovery for other objects.

DSNB314I ***csect-name* DAMAGE ASSESSMENT TO BE TRIGGERED FOR GROUP BUFFER POOL *gpbname* REASON=*reason***

Explanation

Db2 is about to initiate the damage assessment function for group buffer pool *gpbname* because of a detected error in either the coupling facility in which the group buffer pool was allocated, or in the connectivity from the MVS systems to the coupling facility.

reason is one of the following:

100%LCON
An error has occurred in a coupling facility or in the attachments of MVS systems to a coupling facility which has caused all Db2 members to lose connectivity to the named group buffer pool.

STRFAIL
There was an error in the coupling facility in which the group buffer pool was allocated which caused a failure of the coupling facility structure.

CONERROR
The named group buffer pool is currently allocated in a coupling facility, but Db2 cannot connect to the group buffer pool because the system on which it is running does not currently have connectivity, and MVS has indicated that currently no other member is actively connected and has connectivity.

DAP
The named group buffer pool is in damage assessment pending (DAP) state.

System action

Db2 triggers the damage assessment function to ensure that any changed pages that might have been cached in the affected group buffer pool get marked as "needing recovery" (the objects to which the pages belong are marked in GRECP state). This message should be immediately followed by a DSNB304I message indicating that the group buffer pool has been entered into damage assessment pending (DAP) state.

If there are transactions that are in progress at the time of the connectivity failure, Db2 might need to add pages to the logical page list (LPL).

There is one case where Db2 triggers damage assessment for a group buffer pool, but no DSNB314I message is issued. This case is where the group buffer pool was manually deleted (via MVS SETXCF FORCE commands) while all connections to the group buffer pool were failed-persistent (e.g. all Db2 members were down). In this case, the next Db2 member to connect to the group buffer pool will cause MVS to try to reallocate a new instance of the group buffer pool in some coupling facility in the CFRM policy preference list. If the allocation succeeds, then Db2, by doing a coupling facility structure version id comparison, will detect that the previous instance of the group buffer pool had been lost, and will trigger damage assessment. But you will not receive the DSNB314I message in this case, nor will you receive the DSNB304I or DSNB305I messages indicating that the group buffer pool has been put into damage assessment pending (DAP) state. You will only receive a series of DSNB322I and/or DSNB323I messages indicating those pagesets or partitions that have been put into GRECP state by the damage assessment process.

System programmer response

Use the START DATABASE command to recover the LPL pages and GRECP objects. If DSNDB01 or DSNDB06 objects are in GRECP state or have LPL pages, you might need to recover these first, before proceeding with GRECP or LPL recovery for other objects.

DSNB315I *csect-name* GROUP BUFFER POOL *gpbname* IS ALLOCATED AS GBPCACHE *cacheatt*

Explanation

YES
The group buffer pool will be used for data caching.

NO
The group buffer pool will not be used for data caching. It will be used for cross invalidation only.

One Db2 member issues this message whenever the structure is allocated. Db2 detects this on the first connection to the group buffer pool either in the mainline processing or during group buffer pool rebuild.

System action

Db2 processing continues.

DSNB316I *csect-name* GROUP BUFFER POOL *gbp-name* DELETED BECAUSE OF SUBSYSTEM PARAMETER SETTING

Explanation

The specified group buffer pool was deleted during Db2 restart processing.

csect-name
The name of the control section that issued the message.

gbp-name
The name of the group buffer pool that was deleted.

The group buffer pool is deleted when there are no other Db2 subsystems connected to it, if the DEL_CFSTRUCT_ON_RESTART subsystem parameter indicates that Db2 should attempt to delete all group buffer pools.

System action

The group buffer pool named in the message is deleted.

User response

No action is required.

Related reference

DEL CF STRUCTS field (DEL_CFSTRUCTS_ON_RESTART subsystem parameter) (Db2 Installation and Migration)

DSNB317I NO OBJECTS IN GRECP STATUS

Explanation

No objects were found in GRECP status.

System action

Processing continues.

User response

No action is required.

Related concepts

Normal restart and recovery (Db2 Administration Guide)

Related reference

Group buffer pool RECOVER-pending status (Db2 Utilities)

DSNB319A *csect-name* THERE IS A SHORTAGE OF SPACE IN GROUP BUFFER POOL *gbp-name*

Explanation

The amount of storage in the group buffer pool (GBP) coupling facility structure available for writing new pages is low. The GBP is 75 percent full with changed data. As the GBP fills with changed data, the castout thresholds are continuously reached, and the castout engines must continuously work to attempt to keep the number of changed pages in the GBP below the castout thresholds. Also, the more changed data the GBP contains, the less efficiently it operates. Completely running out of GBP storage can result in transaction delays and in pages being added to the logical page list (LPL).

System action

Db2 processing continues.

This message is non-scrollable. It remains highlighted on the console until you take the appropriate action. This message might not be automatically deleted in a pre SP5.2.1-JES3 environment.

Operator response

Contact the system programmer to fix the storage problem.

System programmer response

You can relieve the GBP storage shortage by taking one or more of the following actions:

- Use the ALTER GROUPBUFFERPOOL command to lower the CLASST and GBPOOLT castout thresholds.
- Use the ALTER GROUPBUFFERPOOL command to lower the GBPCHKPT GBP checkpoint frequency.
- Use the MVS SETXCF START,REBUILD command to expand the GBP coupling facility structure. If you rebuild, you can use the ALTER GROUPBUFFERPOOL command to lower the RATIO so that a higher percentage of the GBP storage is given to data entries over directory entries.
- If you are running on MVS 5.2 or a subsequent release, you can use the MVS SETXCF START,ALTER command to expand the size of the GBP (the maximum size to which you can expand is determined by the SIZE parameter in the CFRM policy that was used to allocate the GBP).

If you don't do anything to relieve the storage shortage, message DSNB325A appears if the GBP reaches 90 percent full.

Message DSNB327I appears when the GBP storage shortage is relieved.

You can monitor the amount of GBP storage in use with the DISPLAY GBPOOL command and with the Db2 statistics trace. Monitor the castout activity to ensure that castouts are keeping up with the rate of GBP-write activity. You can use Performance trace classes 20 and 21 (specifically, IFCIDs 0261, 0262 and 0263) to do more detailed monitoring of the Db2 castout processing.

DSNB320I *csect-name* DBNAME *database-name* SPACENAME *space-name* INSTANCE*instance-number* PARTITION *partition-number* IN GROUP BUFFERPOOL *pool-name* IS IN GROUP BUFFERPOOL RECOVERY PENDING STATE

Explanation

The named table space or index space partition is in group buffer pool recovery pending (GRECP) status.

csect-name
The name of the control section that issued the message.

database-name
The name of the database.

space-name
The name of the table space or index space.

instance-number
The instance number of the table space or index space.

partition-number
The partition number.

pool-name
The name of the group buffer pool.

System action

The data in the named partition is not accessible.

User response

Issue the START DATABASE command on the partition to remove the GRECP status and make the data accessible again. You can also use the RECOVER or LOAD utility with the REPLACE option to clear the GRECP status.

Severity

4 (warning)

Related reference
-START DATABASE (Db2) (Db2 Commands)
RECOVER (Db2 Utilities)
LOAD (Db2 Utilities)
Group buffer pool RECOVER-pending status (Db2 Utilities)

DSNB321I ***csect-name*** **DBNAME** ***database-name*** **SPACENAME** ***space-name*** **INSTANCE** ***instance-number*** **IN GROUP BUFFERPOOL** ***pool-name*** **IS IN GROUP BUFFERPOOL RECOVERY PENDING STATE**

Explanation

The named table space or index space is in group buffer pool recovery pending (GRECP) status.

csect-name
The name of the control section that issued the message.

database-name
The name of the database.

space-name
The name of the table space or index space.

instance-number
The instance number of the table space or index space.

pool-name
The name of the group buffer pool.

System action

The table space or index space is not accessible.

User response

Issue the START DATABASE command on the partition to remove the GRECP status and make the data accessible again. You can also use the RECOVER or LOAD utility with the REPLACE option to clear the GRECP status.

Severity

4 (warning)

Related reference
-START DATABASE (Db2) (Db2 Commands)
RECOVER (Db2 Utilities)
LOAD (Db2 Utilities)
Group buffer pool RECOVER-pending status (Db2 Utilities)

DSNB322I ***csect-name*** **- TABLE SPACE OR INDEX SPACE WITH DBID X'***dbid***' PSID X'***psid***' PARTITION** ***part-number*** **IN GROUP BUFFERPOOL** ***gbpname*** **IS IN GROUP BUFFERPOOL RECOVERY PENDING STATE AND CANNOT BE AUTOMATICALLY RECOVERED**

Explanation

This message reports the group buffer pool recovery pending (GRECP) status of the table space or index space partition identified by the internal identifiers DBID and PSID. This message is issued instead of message DSNB320I when the name of the table space or index space is not available. The partition cannot be automatically recovered because there are retained physical locks (P-locks) on the partition.

System action

The data in the identified partition is not accessible.

User response

Issue the -DISPLAY DATABASE(*) SPACENAM(*) RESTRICT command to determine the table spaces or index spaces partition in GRECP status. First, start the failed Db2 members that hold retained P-locks on the

partition.Issue the -START DATABASE command on the partition to remove the GRECP status and make the data accessible again. You can also use the RECOVER or LOAD utility with the REPLACE option to clear the GRECP status.

Severity

4 (warning)

DSNB323I ***csect-name*** **- TABLE SPACE OR INDEX SPACE WITH DBID X'*dbid*' PSID X'*psid*' IN GROUP BUFFERPOOL *gbpname* IS IN GROUP BUFFERPOOL RECOVERY PENDING STATE AND CANNOT BE AUTOMATICALLY RECOVERED**

Explanation

This message reports the group buffer pool recovery pending (GRECP) status of the table space or index space identified by the internal identifiers DBID and PSID. This message is issued instead of message DSNB321I when the name of the table space or index space is not available. The table space or index space cannot be automatically recovered because there are retained physical locks (P-locks) on the space.

System action

The table space or index space is not accessible.

User response

Issue the -DISPLAY DATABASE(*) SPACENAM(*) RESTRICT command to determine the table spaces or index spaces in GRECP status. First, start the failed Db2 members that hold retained P-locks on the table space or index space.Issue the -START DATABASE command on the table space or index space to remove the GRECP status and make the data accessible again. You can also use the RECOVER or LOAD utility with the REPLACE option to clear the GRECP status.

Severity

4 (warning)

DSNB325A ***csect-name*** **THERE IS A CRITICAL SHORTAGE OF SPACE IN GROUP BUFFER POOL *gbp-name***

Explanation

The amount of storage in the group buffer pool (GBP) coupling facility structure available for writing new pages is critically low. The primary or secondary GBP is 90 percent full with changed data. (A *gbp-name* that ends in SEC is a secondary GBP in a duplexing environment.)

As the GBP fills with changed data, the castout thresholds are continuously reached, and the castout engines must continuously work to attempt to keep the number of changed pages in the GBP below the castout thresholds. In addition, the more the GBP is filled with changed data, the less efficient are the coupling facility storage management algorithms. Completely running out of GBP storage can result in transaction delays and in pages being added to the logical page list (LPL).

System action

Db2 processing continues.

This message is non-scrollable. It remains highlighted on the console until you take the appropriate action.

This message might not be automatically deleted in a pre-SP5.2.1-JES3 environment.

Operator response

Contact the system programmer to fix the storage problem.

System programmer response

You can relieve the GBP storage shortage by taking one or more of the following actions:

- Use the ALTER GROUPBUFFERPOOL command to lower the CLASST and GBPOOLT castout thresholds.
- Use the ALTER GROUPBUFFERPOOL command to lower the GBPCHKPT GBP checkpoint frequency.
- Use the MVS SETXCF START,REBUILD command to expand the GBP coupling facility structure. If you rebuild, you can use the ALTER GROUPBUFFERPOOL command to lower the RATIO so that a higher percentage of the GBP storage is given to data entries over directory entries.
- If you are running on MVS 5.2 or a subsequent release, you can use the MVS SETXCF START,ALTER command to expand the size of the GBP (the maximum size to which you can expand is determined by the SIZE parameter in the CFRM policy that was used to allocate the GBP).

If you do not do anything to relieve the storage shortage, message DSNB228I appears if a write to the GBP fails due to a 'GBP full' condition. If Db2 detects a 'full' condition, it will suspend the transaction, initiate castout activity, and then retry the write to the GBP. If the GBP write still fails after several retry attempts, then Db2 adds the page to LPL.

Message DSNB327I is displayed when the GBP storage shortage is relieved.

You can monitor the amount of GBP storage in use with the DISPLAY GBPOOL command and with the Db2 statistics trace. Monitor the castout activity to ensure that castouts are keeping up with the rate of GBP-write activity. You can use Performance trace classes 20 and 21 (specifically, IFCIDs 0261, 0262 and 0263) to do more detailed monitoring of the Db2 castout processing.

DSNB327I ***csect-name* GROUP BUFFER POOL *gbp-name* HAS ADEQUATE FREE SPACE**

Explanation

The group buffer pool (GBP) coupling facility structure has adequate space available for the writing of new pages to the GBP.

This message may be issued when either of the following occurs:

- Rebuilding of GBP reduces changed page count to 60% or less of GBP capacity.
- 'changed data.' entries decrease to 60% or lower when they were previously 75% GBP capacity or higher.

System action

Db2 processing continues.

DSNB328I **OBJECT NAME *object-name* OBJECT ID X'*object-id*' REMAINS IN GRECP STATUS. USER ACTION IS NEEDED TO RECOVER THE OBJECT**

Explanation

Db2 left an object in GRECP status.

object-name
The identifier of the object that was left in the indicated status. It uses one of the following formats:

- *db-name.space-name* for table spaces and index spaces.
- *db-name.space-name.part-number* if the object is a partition within a table space or index space

Rarely *object-name* might contain asterisks and internal identifiers, such as `****0010.****0002`, if Db2 cannot obtain the object name.

object-id
The internal DBID and PSID identifiers, for use by IBM Support.

Reasons that the object remains in the specified status include the following examples:

- Db2 attempted several times but failed to automatically recover the objects, and this member stopped trying automatic recovery
- Db2 does not recovery objects in GRECP status in certain conditions, such as the following examples:
  - ACCESS(MAINT) is specified when Db2 is started.
  - LIGHT is specified when Db2 is started.
  - The objects in GRECP status use a buffer pool that has the AUTOREC=NO attribute.
  - The objects in GRECP status are deferred by the value of the RESTART or DEFER field on panel DSNTIPS.

System action

The table space or index space that is in the indicated status is not accessible.

User response

When this message is issued, no member subsequently attempts any automatic recovery of the object. You must recover the objects manually.

Severity

0 (informational)

Related concepts
Normal restart and recovery (Db2 Administration Guide)
Related reference
Group buffer pool RECOVER-pending status (Db2 Utilities)
Data sharing status descriptions (Db2 Data Sharing Planning and Administration)
DSNTIPS: Databases and spaces to start automatically panel (Db2 Installation and Migration)
RESTART OR DEFER field (RESTART subsystem parameter) (Db2 Installation and Migration)
START NAMES field (ALL subsystem parameter) (Db2 Installation and Migration)

DSNB330I ***csect-name* GROUP BUFFER POOL *gbpname* CANNOT BE CONNECTED FOR REBUILD DB2 REASON CODE = *reason1* MVS IXLCONN REASON CODE = *reason2***

Explanation

Db2 was not able to connect to the named group buffer pool for rebuild. *reason1* is the Db2 reason

code. *reason2* is the MVS IXLCONN reason code. See *MVS/ESA Programming: Sysplex Services Reference* for an explanation of MVS IXLxxxx reason codes.

System action

Db2 stops the rebuild.

Problem determination

If the MVS IXLCONN reason code is xxxx0C08 (structure allocation failed because there was no suitable facility to allocate based on the preference list in the MVS CFRM administrative policy), or if the MVS IXLCONN reason code is xxxx084C (user does not have proper Security Access Facility (SAF) authorization), then IFCID 0250, if active, contains additional diagnostic information.

DSNB331I ***csect-name*** **REBUILD STARTED FOR GROUP BUFFER POOL** ***gbpname*** **REASON =** ***reason***

Explanation

A rebuild has been initiated for the named group buffer pool. *reason* indicates the reason why the rebuild was initiated. *reason* can be one of the following:

OPERATOR
The operator initiated a SETXCF command to initiate the rebuild.

LOSSCONN
MVS detected a loss of connectivity to the group buffer pool.

This message is issued by each Db2 member participating in the rebuild.

System action

The Db2 members that are actively connected to the named group buffer pool participate in the rebuild. Db2 accomplishes the group buffer pool rebuild processing in two phases:

1. Quiesce phase. Each member quiesces all local access to the group buffer pool.
2. Connect phase. Each member connects to the new structure. Each page set or partition castout owner that has connectivity to original structure is responsible for writing pages from the original structure to the new one. If there are not enough data entries in the new structure, the page set and partition owners cast those pages out to DASD instead. Each member issues message DSNB332I after it completes this activity. After all members have completed their castout owner rebuild work, the group buffer pool structure owner does the final sweep and checks to see if there are any changed pages still remaining in the original structure. If so, the structure owner reads the changed pages from the original structure and writes them to the new one. The structure owner issues message DSNB333I after it has completed the final sweep.

After all members have responded to MVS indicating that its connect phase processing is complete, MVS then notifies each member that the rebuild is complete. Each Db2 member issues message DSNB338I indicating that the rebuild has completed successfully.

If an error occurs during the rebuild, the rebuild is stopped. Each Db2 member issues message DSNB335I indicating the reason why the rebuild is stopping, followed by message DSNB339I indicating that the rebuild has not completed successfully. The operator can also stop rebuilds using the MVS SETXCF command.

DSNB332I ***csect-name*** **THIS MEMBER HAS COMPLETED CASTOUT OWNER WORK FOR GROUP BUFFER POOL** ***gbpname*** **PAGES CAST OUT FROM ORIGINAL STRUCTURE =** ***value1*** **PAGES WRITTEN TO NEW STRUCTURE =** ***value2***

Explanation

This Db2 member has completed its part of the rebuild processing for the named group buffer pool for the page sets and partitions for which it is the castout owner.

value1 indicates the number of pages that this member has castout to DASD for the rebuild. If the new structure has a sufficient number of data entries, then *value1* should normally be zero because Db2 writes the changed pages from the original structure to the new structure. However, if the new structure does not have sufficient space, then *value1* could be greater than zero because Db2 responds to insufficient space in the new structure by casting the changed pages in the original structure to DASD instead of writing them to the new structure.

value2 indicates how many changed pages this member wrote to the new structure from the original as part of the rebuild process. If the new structure has sufficient space, then each Db2 that has connectivity to the original structure writes the changed pages for page sets and partitions for which it is the castout owner from the original structure to the new structure, and *value2* indicates the number of pages that the Db2 member wrote.

value1 and *value2* would be zero if this member has no page set or partition castout ownership responsibility.

This message is issued by each Db2 member that has connectivity to the original group buffer pool, and it is always be preceded by message DSNB331I or DSNB740I.

System action

If this Db2 member is not the group buffer pool structure owner, then its rebuild work is done, and it notifies MVS that it has completed its part of the rebuild and awaits later notification that all members have completed. If this member is the structure owner, then it proceeds to its final sweep processing (see DSNB333I).

Refer to "System Action" for message DSNB331I for an explanation of the group buffer pool rebuild processing.

DSNB333I ***csect-name*** **FINAL SWEEP COMPLETED FOR GROUP BUFFER POOL** ***gbpname*** **PAGES WRITTEN TO NEW STRUCTURE =** ***value1***

Explanation

Db2 has completed the final sweep for the rebuild of the named group buffer pool. A final sweep means that the Db2 member that is the group buffer pool structure owner ensures that all changed pages have either been cast out to DASD or have been written to the new structure after all the page set and partition owners have finished their work. If any changed pages are found in the original structure during the final sweep, then the structure owner writes them out to the new structure. *value1* should be zero in most cases for a manual rebuild. *value1* will probably be greater than zero in most cases where the rebuild was initiated because a Db2 lost connectivity to the group buffer pool.

This message is issued by the structure owner and is always preceded by message DSNB332I.

System action

Immediately after issuing this message, the structure owner notifies MVS that the rebuild has completed, and MVS should soon begin notifying each participating member that the rebuild is complete.

Refer to "System Action" for message DSNB331I for an explanation of the group buffer pool rebuild processing.

DSNB335I ***csect-name*** **REBUILD STOPPED FOR GROUP BUFFER POOL** ***gbpname*** **REASON =** ***reason1*** **DB2 REASON CODE =** ***reason2***

Explanation

A rebuild has been stopped for the named group buffer pool.

reason1 indicates why the rebuild was stopped:

OPERATOR
The operator initiated an MVS SETXCF command to stop the rebuild.

LOSSCONNNEW
One or more of the Db2 members lost connectivity to the new group buffer pool structure while the rebuild was in progress.

LOSSCONNOLD
One or more of the Db2 members lost connectivity to the original group buffer pool structure while the rebuild was in progress.

STRFAILNEW
The new group buffer pool structure failed while the rebuild was in progress.

STRFAILOLD
The original group buffer pool structure failed while the rebuild was in progress.

DB2REASON
Db2 decided to stop the rebuild. The reason code given in *reason2* indicates why Db2 stopped the rebuild.

INSUFFCONN
New structure does not provide connectivity that is better than or equivalent to the current structure.

NOBETRCONN
New structure does not provide better connectivity than the current structure for a *LossConn* rebuild

If *reason1* indicates 'DB2REASON', then *reason2* specifies a Db2 reason code that indicates why Db2 stopped the rebuild. If *reason1* is not 'DB2REASON', then *reason2* is zero.

This message is normally preceded by message DSNB331I, which indicates that the rebuild was started and the reason why the rebuild was started. This message is issued by each Db2 member participating in the rebuild. This message is followed by message DSNB339I.

System action

The new structure is discarded. If the original structure is still usable, then all members that still have connectivity to the original structure resume using it. Members that do not have connectivity to the original structure disconnect, and their connections become failed-persistent.

If the original structure is not usable, then Db2 initiates damage assessment processing for the group buffer pool.

System programmer response

If the rebuild stopped because of "DB2REASON", see the explanation for the reason code given.

DSNB338I ***csect-name*** **THE REBUILD FOR GROUP BUFFER POOL** ***gbpname*** **HAS COMPLETED SUCCESSFULLY**

Explanation

The rebuild for the named group buffer pool has successfully completed.

This message is preceded by message DSNB331I which indicates the reason why the rebuild was started. This message is issued by each Db2 member participating in the rebuild.

System action

The original structure is discarded and all DB2s that are connected to the group buffer pool begin using the new structure.

DSNB339I ***csect-name*** **THE STOP OF THE REBUILD FOR GROUP BUFFER POOL** ***gbpname*** **HAS COMPLETED**

Explanation

The stop of the rebuild for the named group buffer pool has completed.

This message is preceded by message DSNB335I which indicates the reason why the rebuild was stopped. This message is issued by each Db2 member participating in the rebuild.

System action

The new structure is discarded. If the original structure is still usable, then all members that still have connectivity to the original structure resume using it, and members that do not have connectivity to the original structure disconnect and their connection goes into a failed-persistent state.

If the original structure is not usable, then Db2 initiates damage assessment processing for the group buffer pool.

DSNB340I ***csect-name*** **UNEXPECTED ERROR DURING REBUILD FOR GROUP BUFFER POOL** ***gbpname*** **MVS** ***service-name*** **RETURN CODE =** ***rc*** **MVS** ***service-name*** **REASON CODE =** ***reason***

Explanation

Db2 received an unexpected error from MVS during rebuild processing for the named group buffer pool.

service-name is one of the following:

- IXLREBLD
- IXLEERSP

rc is the return code from the MVS service and *reason* is the reason code.

System action

Db2 stops the rebuild.

System programmer response

See *MVS/ESA Programming: Sysplex Services Reference* for an explanation of the return and reason code for the named MVS service.

DSNB350I ***csect-name*** **DBNAME** ***database-name*** **SPACENAME** ***space-name*** **INSTANCE** ***instance-number*** **CANNOT BE AUTOMATICALLY RECOVERED. DB2 REASON CODE =** ***reason-code***

Explanation

Following a group buffer pool failure, Db2 cannot automatically recover the named table space or index space.

csect-name
The name of the control section that issued the message.

database-name
The name of the database that is associated with the recovery.

space-name
The name of the table space or index space that is associated with the recovery.

instance-number
The instance number of the table space or index space.

reason-code
The Db2 reason code value that indicates the reason for the failure. For explanations of reason codes, see Db2 reason codes (Db2 Codes).

System action

The table space or index space remains in group buffer pool recovery pending (GRECP) status and is inaccessible.

User response

Use the START DATABASE command on the table space or index space to remove the GRECP status and make the data accessible. You can also use the RECOVER or LOAD utility with the REPLACE option to clear the GRECP status.

Severity

4 (warning)

Related reference

-START DATABASE (Db2) (Db2 Commands)
RECOVER (Db2 Utilities)
LOAD (Db2 Utilities)
Group buffer pool RECOVER-pending status (Db2 Utilities)

DSNB351I ***csect-name*** **DBNAME** ***database-name*** **SPACENAME** ***space-name*** **INSTANCE** ***instance-number*** **PARTITION** ***partition-number*** **CANNOT BE AUTOMATICALLY RECOVERED. DB2 REASON CODE =** ***reason-code***

Explanation

Following a group buffer pool failure, Db2 cannot automatically recover the named table space or index space partition.

csect-name
The name of the control section that issued the message.

database-name
The name of the database that is associated with the recovery.

space-name
The name of the table space or index space that is associated with the recovery.

instance-number
The instance number of the table space or index space.

partition-number
The partition number.

reason-code
The Db2 reason code value that indicates the reason for the failure. For explanations of reason codes, see Db2 reason codes (Db2 Codes).

System action

The partition remains in group buffer pool recovery pending (GRECP) status and is inaccessible.

User response

Use the START DATABASE command on the partition to remove the GRECP status and make the data accessible. You can also use the RECOVER or LOAD utility with the REPLACE option to clear the GRECP status.

Severity

4 (warning)

Related reference

-START DATABASE (Db2) (Db2 Commands)
RECOVER (Db2 Utilities)
LOAD (Db2 Utilities)
Group buffer pool RECOVER-pending status (Db2 Utilities)

DSNB352I ***csect-name*** **AUTOMATIC RECOVERY CANNOT BE INITIATED FOR GROUPBUFFER POOL** ***gbp-name*** **REASON =** ***reason***

Explanation

Following a failure of the named group buffer pool, Db2 is not able to initiate automatic recovery.

reason indicates the reason why automatic recovery was not initiated:

AUTORECNO
The AUTOREC option is set to NO for the group buffer pool.

CONNRELEASE
At least one actively connected Db2 member is not at the proper release to support automatic recovery.

System action

The page sets and partitions that are in group buffer pool recovery pending (GRECP) status remain inaccessible.

User response

Use the Db2 -START DATABASE command on the page sets and partitions to remove the GRECP status and make the data accessible. You can also use the RECOVERor LOAD utility with the REPLACE option to clear the GRECP status.

If *reason* is AUTORECNO and you want to enable automatic recovery for the group buffer pool, use the ALTER GROUPBUFFERPOOL command to set AUTOREC to YES for the group buffer pool.

If *reason* is CONNRELEASE, then you must ensure that all Db2 members in the group are running at the

appropriate release. Automatic recovery is not supported unless all members are running Version 5 or a later release.

Severity

4 (warning)

Related reference

-START DATABASE (Db2) (Db2 Commands)

-ALTER GROUPBUFFERPOOL (Db2) (Db2 Commands)

LOAD (Db2 Utilities)

RECOVER (Db2 Utilities)

Group buffer pool RECOVER-pending status (Db2 Utilities)

Data sharing status descriptions (Db2 Data Sharing Planning and Administration)

DSNB353I ***csect-name*** **ASYNCHRONOUS GRECP RECOVERY IN PROGRESS FOR GROUP BUFFER POOL** ***bpoolname***

Explanation

Following a group buffer pool failure, Db2 triggers an automatic recovery process to attempt to recover GRECP page sets for the specified group buffer pool. This message is issued once by any Db2 member who is the page set castout owner on one of the objects being recovered.

System action

Check for the DSNB354I message to verify the completion of the automatic recovery process.

DSNB354I ***csect-name*** **ASYNCHRONOUS GRECP RECOVERY HAS COMPLETED FOR GROUP BUFFER POOL** ***bpoolname*****.**

Explanation

Db2 has completed the GRECP recovery process for those GRECP page sets in the group buffer pool specified in the message. This message is issued once by any Db2 member who previously issued a DSNB353I message, who is the page set castout owner on one of the objects being recovered.

DSNB355I ***csect-name*** **GROUP BUFFER POOL** ***gbpname*** **RECOVERY LRSN VALUES MIGHT CAUSE A DELAY IN GRECP RECOVERY. PAGE LEVEL =** ***minimum-page-lrsn*** **MEMBER LEVEL =** ***minimum-member-lrsn*** **PAGE LEVEL IN LOCAL TIMESTAMP =** ***minimum-page-timestamp*** **MEMBER LEVEL IN LOCAL TIMESTAMP =** ***minimum-member-timestamp***

Explanation

This message is issued at a group buffer pool checkpoint, if the minimum page LRSN or the minimum member LRSN that are used in recovery from the group buffer pool recovery pending (GRECP) state meet either of the following conditions:

- The minimum page LRSN is older than the time when the third-to-last group buffer pool checkpoint was taken.

  For example, suppose that group buffer pool checkpoints are taken at times T1, T2, T3, and T4. At time T4, if Db2 detects that the time of the minimum page LRSN is earlier than time T1, this message is issued.
- The minimum member LRSN is invalid. The value is X'FFFFFFFFFFFF' for a six-byte LRSN, or X'FFFFFFFFFFFFFFFFFFFF' for a ten-byte LRSN.

minimum-page-lrsn
The minimum page LRSN. This value is the oldest changed page clean-to-dirty LRSN that was recorded at the time of the last group buffer pool checkpoint.

minimum-member-lrsn
The minimum member LRSN. This value is the minimum member-level, write-pending LRSN that was recorded at the last group buffer pool checkpoint. Db2 records a restart/redo LRSN for each member of the data sharing group at a group buffer pool checkpoint. The minimum member LRSN reflects the minimum value across all members. If the group buffer pool fails, Db2 does a merge log scan to recover the page sets and partitions that are in GRECP status. Db2 uses each member's restart/redo LRSN in conjunction with the minimum page LRSN to determine the starting point for the merge log scan.

minimum-page-timestamp
The local timestamp of the minimum page-level LRSN.

minimum-member-timestamp
The local timestamp of the minimum member-level LRSN. If the minimum member-level LRSN is invalid, the string ********** is displayed.

The local timestamps are in the following format:

```
hh:mm:ss month dd, yyyy
```

hh*:*mm*:*ss
The time portion of the timestamp, expressed as hours, minutes, and seconds.

month
An alphanumeric abbreviation for the month. Possible values are:

Month	*month* value in the local timestamp
January	JAN
February	FEB
March	MAR
April	APR
May	MAY
June	JUN
July	JUL
August	AUG
September	SEP
October	OCT
November	NOV
December	DEC

dd
The day of the month.

yyyy
The year.

System action
Processing continues. This message is displayed on the console until either of the following situations occurs:

- The minimum page LRSN is newer than the third-to-last group buffer pool checkpoint, and the minimum member LRSN is valid.
- The member that issued the message disconnects from the group buffer pool.

User response
If this message is displayed after all Db2 data sharing members are running normally or have shut down normally, contact IBM Support for assistance.

If this message is displayed after some Db2 data sharing members shut down abnormally, restart those Db2 members.

While the condition that caused this message persists, applications can continue to run without any impact. However, this condition lengthens the time that is required for recovery from GRECP status.

This message is issued intermittently when the condition that causes it occurs. If DSNB355I messages continue to be displayed, contact IBM Support for assistance.

Collect the following diagnostic items:

- Dump of the group buffer pool.
- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.

DSNB356I ***csect-name* FOR GROUP BUFFER POOL *gbp-name* , THE CONDITION THAT CAUSED THE PREVIOUS DSNB355I MESSAGE DOES NOT CURRENTLY EXIST. PREVIOUS PAGE LEVEL = *previous-page-lrsn previous-page-timestamp* CURRENT PAGE LEVEL = *current-page-lrsn current-page-timestamp* PREVIOUS MEMBER LEVEL = *previous-member-lrsn previous-member-timestamp* CURRENT MEMBER LEVEL = *current-member-lrsn current-member-timestamp***

Explanation

This message is issued at a group buffer pool checkpoint when the minimum page LRSN is newer than the third-to-last group buffer pool checkpoint, and the minimum member LRSN is valid.

csect-name
The name of the control section that issued the message.

gbp-name
The name of the group buffer pool.

previous-page-lrsn
The page-level LRSN in the previous DSNB355I message.

previous-page-timestamp
The local timestamp of the page-level LRSN in the previous DSNB355I message.

current-page-lrsn
The current page-level LRSN.

current-page-timestamp
The local timestamp of the current page-level LRSN.

previous-member-lrsn
The member-level LRSN in the previous DSNB355I message.

previous-member-timestamp
The local timestamp of the member-level LRSN in the previous DSNB355I message.

current-member-lrsn
The current member-level LRSN.

current-member-timestamp
The local timestamp of the current member-level LRSN.

The local timestamps are in the following format:

```
hh:mm:ss month dd, yyyy
```

hh*:*mm*:*ss
The time portion of the timestamp, expressed as hours, minutes, and seconds.

month
An alphanumeric abbreviation for the month. Possible values are:

Month	*month* value in the local timestamp
January	JAN
February	FEB
March	MAR
April	APR
May	MAY
June	JUN
July	JUL
August	AUG
September	SEP
October	OCT
November	NOV
December	DEC

dd
The day of the month.

yyyy
The year.

System action:
Db2 processing continues.

Related information

DSNB355I
csect-name GROUP BUFFER POOL *gbpname* RECOVERY LRSN VALUES MIGHT CAUSE A DELAY IN GRECP RECOVERY. PAGE LEVEL = *minimum-page-lrsn* MEMBER LEVEL = *minimum-member-lrsn* PAGE LEVEL IN LOCAL TIMESTAMP = *minimum-page-timestamp* MEMBER LEVEL IN LOCAL TIMESTAMP = *minimum-member-timestamp*

DSNB357I *csect-name* AUTOMATIC LPL RECOVERY SUPPRESSED FOR OBJECT TYPE *object-type* OBJECT NAME *object-name* REASON *reason-type*

Explanation

One or more pages in the object that is identified in the message have been added to the logical page list (LPL). However, Db2 cannot initiate automatic LPL recovery due to an environmental condition that prevents automatic LPL recovery.

The object could be a table space, an index space, or a partition within a table space or an index space that is identified by the *object-type*. *object-name* identifies the name.

If the object is a table space or an index space, the format of the name is *dbname.spacename*. If the object is a partition within a table space or an index space, the format of the name is *dbname.spacename.partnumber*. *dbname* is the database name. *spacename* is the table space or the index space name. *partnumber* is the partition number.

reason indicates the condition that prevents Db2 from being able to initiate automatic LPL recovery. Here is a list of the potential values for *reason*:

DASD
Db2 encountered a DASD I/O error.

RESTART
Db2 is in Restart or End_Restart mode.

GBP
Db2 Group Buffer Pool structure failure or 100% loss of connectivity.

System action

The Automatic LPL Recovery is not initiated.

Programmer response

Check the reason that is specified to solve the system condition. To recover the LPL page, perform one of the following actions:

- Issue the START DATABASE command with the SPACENAM option
- Run the RECOVER or LOAD utility with REPLACE keyword.

DSNB401I BUFFERPOOL NAME *bp-name*, BUFFERPOOL ID *bp-id*, USE COUNT *use-count*

Explanation

This message displays output from the DISPLAY BUFFERPOOL command. For each buffer pool, this message marks the beginning of multiple lines of information about that buffer pool. Some lines in the output have their own message numbers or alphanumeric identifiers to assist with identification.

The first line (DSNB401I) contains the following information:

bp-name
The external name of the buffer pool. *bp-name* can be one of the following values: BP0 to BP49, BP8K0 to BP8K9, BP16K0 to BP16K9, BP32K, or BP32K1 to BP32K9.

bp-id
The internal identifier for the buffer pool. *bp-id* can be one of the following values: 0 to 49, 80 to 89, 100 to 109, or 120 to 129.

use-count
The number of open table spaces or index spaces that use this buffer pool. A value of zero means that the buffer pool is inactive.

The remaining output for each buffer pool consists of one or more of the following sections, in the indicated order:

- DSNB402I: Information about allocation status
- DSNB404I: Threshold information
- DSNB406I: PGFIX and PGSTEAL information
- DSNB409I: Start time of the statistics interval for DETAIL(INTERVAL)
- DSNB410I: Start time of the statistics interval for DETAIL(*)
- DSNB411I: Page read statistics
- DSNB412I: Sequential prefetch statistics
- DSNB413I: List prefetch statistics
- DSNB414I: Dynamic prefetch statistics
- DSNB415I: Prefetch statistics
- DSNB420I: Page write statistics
- DSNB421I: Page-write threshold statistics
- DSNB431I: Information about allocation status for simulated buffer pools
- DSNB432I: Simulated buffer pool activity
- DSNB440I: Parallel activity statistics
- DSNB441I: LPL activity statistics
- DSNB453I: Cached and changed page statistics
- DSNB455I: Synchronous I/O delay statistics
- DSNB456I: Asynchronous I/O delay statistics
- DSNB457I: Simulated buffer pool page statistics
- DSNB460I: Page set and partition list information (for a data-sharing environment)
- DSNB464I: Page set and partition list information (for a non-data-sharing environment)
- DSNB466I: Page set and partition statistics
- DSNB467I: Data set statistics
- DSNB546I: Frame size allocation

If information cannot be reported, one or more of the following messages is returned:

- DSNB408I: No detail statistics available
- DSNB459I: Open failure for a data set
- DSNB463I: No objects matched selection criteria

The DISPLAY BUFFERPOOL output ends with one of the following messages:

- DSN9022I: Normal completion
- DSNB499I: Display terminated because of insufficient space

DSNB402I: Information about allocation status

The basic buffer pool information is followed by a description of the allocation status of the buffer pool.

The values of VPSIZE MINIMUM and VPSIZE MAXIMUM are used only when AUTOSIZE =YES.

```
DSNB402I - BUFFER POOL SIZE = pool-size
BUFFERS  AUTOSIZE = autosize
           VPSIZE MINIMUM = minimum size VPSIZE
MAXIMUM = maximum-size
              ALLOCATED      = allocated-
buffers   TO BE DELETED   = delete-buffers
              IN-USE/UPDATED = current-buffers
```

BUFFER POOL SIZE = *pool-size* BUFFERS
The user-specified buffer pool size.

AUTOSIZE = *autosize*
The buffer pool AUTOSIZE attribute that is applicable to the current allocation of the buffer pool.

YES
The buffer pool uses Workload Manager (WLM) services, if available, to automatically adjust the size of the buffer pool. The size is adjusted based on dynamic monitoring of the workload goals and the storage that is available on the system.

NO
The buffer pool does not use WLM services for automatic sizing adjustment of buffer pools.

VPSIZE MINIMUM = *minimum size*
The minimum size of the buffer pool. This value is meaningful only when the value of *autosize* is YES. If the value was never specified, a value of 0 is

shown, and Db2 uses a default value of 75% of the specified value of VPSIZE.

VPSIZE MAXIMUM = *maximum-size*
The maximum size of the buffer pool. This value is meaningful only when the value of *autosize* is YES. If the value was never specified, a value of 0 is shown, and Db2 uses the defaults value, which is 25% greater than the specified VPSIZE value.

ALLOCATED = *allocated-buffers*
The number of allocated buffers in an active buffer pool.

TO BE DELETED = *delete-buffers*
The number of buffers to be deleted in an active buffer pool because of pool contraction.

IN-USE/UPDATED = *current-buffers*
The number of currently active buffers in the buffer pool. These buffers cannot be stolen.

DSNB404I: Threshold information

The information about allocation status is followed by information about the user-modifiable thresholds for the buffer pool.

```
DSNB404I - THRESHOLDS -
             VP SEQUENTIAL             = vpseq
             SP SEQUENTIAL             = spseq
             DEFERRED WRITE            = dwt
             VERTICAL DEFERRED WRT     =
dwv1,dwv2
             PARALLEL SEQUENTIAL       = vppseqt
             ASSISTING PARALLEL SEQT   =
vpxpseqt
```

vpseq
The sequential steal threshold for the virtual pool, expressed as a percentage of the total buffer pool size.

spseq
The sequential steal threshold for the simulated pool, expressed as a percentage of the total simulated buffer pool size.

dwt
The free-buffer deferred write threshold for the buffer pool, expressed as a percentage of the total buffer pool size.

dwv1
The vertical deferred write threshold for the buffer pool, expressed as a percentage of the total buffer pool size.

dwv2
The vertical deferred write threshold for the buffer pool, expressed as an absolute number of buffers. *dwv2* is used to determine the threshold only if *dwv1* is 0 and *dwv2* is non-zero. Otherwise, *dwv1* is used to determine the threshold.

vppseqt
The sequential threshold for parallel query processing, expressed as a percentage of the virtual sequential steal threshold. When the threshold is set to 0, parallel query processing is not supported.

vpxpseqt
The assisting parallel sequential threshold, expressed as a percentage of the sequential threshold for parallel query processing. Use the *vpxpseqt* value to control how much buffer resource is used when this Db2 member is assisting another member of the group in parallel processing. When the threshold is set to 0, this buffer pool is not used to assist other data-sharing members in processing a query. In a non-data-sharing environment, this value is ignored.

DSNB406I: PGFIX and PGSTEAL information

The DISPLAY BUFFERPOOL output includes a description of the PGFIX and PGSTEAL attributes for the buffer pool.

CURRENT = *current-pgfix*
The value of the page fix (PGFIX) attribute for the current allocation of the buffer pool.

YES
The buffer pool is fixed in real storage for the long term.

NO
The buffer pool is fixed in real storage only during an I/O operation.

PENDING = *pending-pgfix*
The value of the PGFIX attribute that is to be applied for the next allocation of the virtual buffer pool.

YES
The buffer pool is to be fixed in real storage for the long term.

NO
The buffer pool is to be fixed in real storage only during an I/O operation.

PAGE STEALING METHOD = *current-pgsteal*
The page stealing method (PGSTEAL) that is in use for the buffer pool.

LRU
The least recently used (LRU) algorithm is used to manage page stealing. This method is the default value.

FIFO
The first-in, first-out (FIFO) algorithm is used to manage page stealing.

NONE
No page stealing occurs. Objects that use this buffer pool are kept resident.

Related information:

Fixing a buffer pool in real storage (Db2 Performance)
Choosing a page-stealing algorithm (Db2 Performance)

DSNB408I: No detail statistics available

DSNB408I indicates that, although you specified the DETAIL option on the DISPLAY BUFFERPOOL command, no detail statistics are available for the requested buffer pool. The statistics are not available because the pool has not been activated since Db2 started.

BUFFER POOL *bp-name*
The name of the buffer pool.

DSNB409I: Start time of the statistics interval for DETAIL(INTERVAL)

When you specify the DETAIL(INTERVAL) option, the output includes the start time of the interval for which the statistics were accumulated.

```
DSNB409I - INCREMENTAL STATISTICS SINCE base-time
```

base-time
The start time. This value is either the time of the previous incremental display or, if no previous incremental display exists, the time that the buffer pool was first activated.

The format is *hh:mm:ss month dd, yyyy*

hh:mm:ss
The time expressed as hour:minutes:seconds.

month
An alphanumeric abbreviation for the month. For example, a value of OCT means October.

dd
The day of the month.

yyyy
The year.

DSNB410I: Start time of the statistics interval for DETAIL(*)

When you specify the DETAIL(*) option, the output includes the start time of the interval for which the statistics were accumulated.

```
DSNB410I - CUMULATIVE STATISTICS SINCE base-time
```

base-time
The start time. This value is the time the buffer pool was first activated.

The format is *hh:mm:ss month dd, yyyy*

hh:mm:ss
The time expressed as hour:minutes:seconds.

month
An alphanumeric abbreviation for the month. For example, a value of OCT means October.

dd
The day of the month.

yyyy
The year.

DSNB411I: Page read statistics

When you specify the DETAIL option, the output includes the page read statistics for the buffer pool.

```
DSNB411I - RANDOM GETPAGE    = rgp
           SYNC READ I/O (R) = srr
           SEQ.   GETPAGE    = sgp
           SYNC READ I/O (S) = srs
           SYNC READ I/O (ZHL) = srrz
           DMTH HIT          = dmt
           PAGE-INS REQ      = pir
           SEQUENTIAL        = seq
           VPSEQT HIT        = vsh
           RECLASSIFY        = rcy
```

RANDOM GETPAGE = *rgp*
The number of nonsequential GETPAGE requests.

SYNC READ I/O (R) = *srr*
The number of synchronous read I/O operations for nonsequential GETPAGE requests.

SYNC READ I/O (ZHL) = *srrz*
The number of synchronous read I/O operations using zHyperLink.

SEQ. GETPAGE = *sgp*
The number of sequential GETPAGE requests.

SYNC READ I/O (S) = *srs*
The number of synchronous read I/O operations for sequential GETPAGE requests.

DMTH HIT = *dmt*
The number of times that the data management threshold was reached.

PAGE-INS REQ = *pir*
The number of page-in operations that are required for read I/O.

SEQUENTIAL = *seq*
The number of buffers on the sequential least-recently-used (SLRU) chain.

VPSEQT HIT = *vsh*
The number of times that the size of the SLRU chain reached the sequential steal threshold (the VPSEQT value) for the buffer pool.

RECLASSIFY = *rcy*
A statistic that is used by IBM for serviceability.

Related information:

Buffer pool thresholds that you can change (Db2 Performance)
-ALTER BUFFERPOOL (Db2) (Db2 Commands)

DSNB412I: Sequential prefetch statistics

When you specify the DETAIL option, the output includes the sequential prefetch statistics for the buffer pool.

REQUESTS = *pft*
The number of times that sequential prefetch was requested.

PREFETCH I/O = *pio*
The number of sequential prefetch read I/O operations.

PAGES READ = *pfp*
The number of pages that are read because of sequential prefetch.

Related information:

Sequential prefetch (PREFETCH='S') (Db2 Performance)

DSNB413I: List prefetch statistics

When you specify the DETAIL option, the output includes the list prefetch statistics for the buffer pool.

```
DSNB413I - LIST PREFETCH -
             REQUESTS        =        pft
PREFETCH  I/O   =        pio
             PAGES READ      =        pfp
```

REQUESTS = *pft*
The number of times that list prefetch was requested.

PREFETCH I/O = *pio*
The number of list prefetch read I/O operations.

PAGES READ = *pfp*
The number of pages that are read because of list prefetch.

Related information:

List prefetch (PREFETCH='L' or 'U') (Db2 Performance)

DSNB414I: Dynamic prefetch statistics

When you specify the DETAIL option, the output includes the dynamic prefetch statistics for the buffer pool.

```
DSNB414I - DYNAMIC PREFETCH -
             REQUESTS        =        pft
PREFETCH  I/O   =        pio
             PAGES READ      =        pfp
```

REQUESTS = *pft*
The number of times that dynamic prefetch was requested.

PREFETCH I/O = *pio*
The number of dynamic prefetch read I/O operations.

PAGES READ = *pfp*
The number of pages that are read because of dynamic prefetch.

Related information:

Dynamic prefetch (PREFETCH='D') (Db2 Performance)

DSNB415I: Prefetch statistics

When you specify the DETAIL option, the output includes the prefetch statistics for the buffer pool.

```
DSNB415I - PREFETCH DISABLED -
             NO BUFFER       =        pfd   NO
READ ENGINE  =           ree
```

NO BUFFER = *pfd*
The number of times that prefetch was disabled for one of the following reasons:

- The buffer pool reached the prefetch disabled threshold (90% full).
- A user disabled prefetch by setting the VPSEQT threshold for the buffer pool to zero.

NO READ ENGINE = *ree*
The number of times that prefetch was disabled because an asynchronous read processor was not available.

Related information:

Read operations and prefetch I/O (Db2 Performance)

DSNB420I: Page write statistics

When you specify the DETAIL option, the output includes the page write statistics for the buffer pool.

SYS PAGE UPDATES = *pages-updated*
The number of buffer updates.

SYS PAGES WRITTEN = *pages-written*
The number of pages that are written to disk.

ASYNC WRITE I/O = *async-writes*
The number of asynchronous write I/O operations.

SYNC WRITE I/O = *sync-writes*
The number of synchronous write I/O operations.

PAGE-INS REQ = *page-ins*
The number of page-ins that are required for write I/O.

DSNB421I: Page-write threshold statistics

When you specify the DETAIL option, the output includes the page-write threshold statistics for the buffer pool.

```
DSNB421I - DWT HIT           =        dwt
VERTICAL DWT HIT  =           vdw
```

DWT HIT = *dwt*
The number of times that the deferred write threshold was reached.

VERTICAL DWT HIT = *vdw*
The number of times that the vertical deferred write threshold was reached.

Related information:

Buffer pool thresholds that you can change (Db2 Performance)

DSNB431I: Information about allocation status for simulated buffer pools

The description of the allocation status of the buffer pool is followed by a description of the allocation status of the simulated buffer pool.

```
DSNB431I - SIMULATED BUFFER POOL SIZE = pool-
size BUFFERS
             ALLOCATED       = allocated-buffers
             IN-USE          = current-in-use
HIGH-IN-USE = high-in-use
             SEQ-IN-USE      = current-
sequential-in-use HIGH SEQ-IN-USE = high-
sequential-in-use
```

SIMULATED BUFFER POOL SIZE = *pool-size* BUFFERS
The user-specified simulated buffer pool size.

ALLOCATED = *allocated-buffers*
The number of simulated buffers that are currently allocated in the simulated buffer pool.

IN-USE = *current-in-use*
The number of simulated buffers that are currently being used to track pages.

HIGH IN-USE = *high-in-use*
The highest number of simulated buffers that have been in use in the simulated buffer pool since the buffer pool simulation began.

SEQ IN-USE = *current-sequential-in-use*
The number of simulated buffers for sequentially accessed pages that are currently in use in the simulated buffer pool.

HIGH SEQ-IN-USE = *high-sequential-in-use*
The highest number of simulated buffers for sequentially accessed pages that have been in use in the simulated buffer pool since the buffer pool simulation began.

DSNB432I: Simulated buffer pool activity

When you specify the DETAIL option, the output includes statistics on activity in the simulated buffer pool, including the numbers of page accesses that the buffer pool simulation determined could be avoided, for various types of read activity.

```
DSNB432I - SIMULATED BUFFER POOL ACTIVITY -
             AVOIDABLE READ PAGE MISSES -
               SYNC    FROM DASD (R) = pages-
sync-rand-dasd
               SYNC    FROM DASD (S) = pages-
sync-seq-dasd
               ASYNC   FROM DASD     = pages-
async-dasd
               SYNC    FROM GBP (R)  = pages-
sync-rand-gbp
               SYNC    FROM GBP (S)  = pages-
sync-seq-gbp
               ASYNC   FROM GBP      = pages-
async-gbp
             PAGES MOVED INTO SIMULATED BUFFER
POOL = pages-to-sim-bp
             TOTAL AVOIDABLE SYNC I/O DELAY =
sync-io-delay MILLISECONDS
```

pages-sync-rand-dasd
The number of pages accessed randomly by avoidable synchronous read I/O from disk.

pages-sync-seq-dasd
The number of pages accessed sequentially by avoidable synchronous read I/O from disk.

pages-async-dasd
The number of pages prefetched by avoidable asynchronous read I/O from disk.

pages-sync-rand-gbp
The number of pages accessed randomly by avoidable synchronous read from the group buffer pool..

pages-sync-seq-gbp
The number of pages accessed sequentially by avoidable synchronous read from the group buffer pool.

pages-async-gbp
The number of pages accessed by avoidable asynchronous read from the group buffer pool.

pages-to-sim-bp
The number of pages that were logically moved from the virtual buffer pool into the simulated buffer pool.

sync-io-delay
The total time in milliseconds that the buffer pool simulation determined would be spent waiting for synchronous read I/O from disk.

DSNB440I: Parallel activity statistics

When you specify the DETAIL option, the output includes statistics about parallel activities for the buffer pool.

```
DSNB440I - PARALLEL ACTIVITY -
           PARALLEL REQUEST  =        tpa
DEGRADED PARALLEL =       dpa
```

PARALLEL REQUEST = *tpa*
The total number of negotiations with the buffer pool for the requested number of sequential prefetch streams.

DEGRADED PARALLEL = *dpa*
The total number of times that the negotiation resulted in the degraded mode of parallel operations.

DSNB441I: LPL activity statistics

When you specify the DETAIL option, the output includes statistics about LPL activity for the buffer pool.

```
DSNB441I - LPL ACTIVITY -
           PAGES ADDED       =        pages
```

pages
The total number of pages for all page sets that are added to the logical page list (LPL) in this buffer pool. This value is equal to the number of DSNB250E messages that are written to the system log after the most recent execution of the DISPLAY BUFFERPOOL command with the DETAIL option.

Related information:

"DSNB250E" on page 50
Displaying the logical page list (Db2 Administration Guide)
Characteristics of pages that are in error (Db2 Administration Guide)

DSNB453I: Cached and changed page statistics

The output includes the number of cached pages and changed pages in the buffer pool for a data set if all of the following conditions are true:

- You specified the LSTATS option on the DISPLAY BUFFERPOOL command.
- The buffer pool is an active buffer pool.
- The number of cached and changed pages are not zero.

The relevant table space or index space is identified in either line DSNB464I or line DSNB465I. The data set is identified in line DSNB466I.

```
DSNB453I - VP CACHED PAGES -
           CURRENT       =        vcount
MAX           =         mvcount
           CHANGED       =        ccount
MAX           =         mccount
```

CURRENT = *vcount*
The number of cached pages in the virtual pool for the data set. This value is the number of buffers that contain pages for the data set in the buffer pool.

MAX = *mvcount*
The maximum number of cached pages in the virtual pool for the data set since the last DISPLAY BUFFERPOOL command with the LSTATS option was issued.

CHANGED = *ccount*
The number of changed pages in the virtual pool for the data set. This value is the number of buffers that were changed in the buffer pool for the data set.

MAX = *mccount*
The maximum number of changed pages in the virtual pool for the data set since the last DISPLAY BUFFERPOOL command with the LSTATS option was issued.

DSNB455I: Synchronous I/O delay statistics

The output includes synchronous I/O delay statistics if all of the following conditions are true:

- You specified the LSTATS option on the DISPLAY BUFFERPOOL command.
- The buffer pool is an active buffer pool.
- The values of the synchronous I/O delay statistics are not zero.

These synchronous I/O delay statistics are reported for a data set for an open table space or index space that is associated with the buffer pool. The values that are listed are the statistics that were gathered since the last display for the data set.

Note: There are two sections to report synchronous I/O delays. The statistics displayed under "SYNCHRONOUS I/O DELAYS" shows I/Os that did not use zHyperlink.

The relevant table space or index space is identified in either line DSNB464I or line DSNB465I. The relative data set within the table space or index space is identified in line DSNB466I.

```
DSNB455I - SYNCHRONOUS I/O DELAYS -
             AVERAGE DELAY          = avd
             MAXIMUM DELAY          = mxd
             TOTAL PAGES            = tpg
```

avd
The average I/O delay in milliseconds for pages in the data set.

mxd
The maximum I/O delay in milliseconds for pages in the data set.

tpg
The total number of pages that are read or written for the data set.

```
SYNCHRONOUS I/O DELAYS WITH ZHYPERLINK -
             AVERAGE DELAY         = avdz
             MAXIMUM DELAY         = mxdz
             TOTAL PAGES           = tpgz
```

avdz
The average I/O delay in microseconds for pages in the data set when zHyperLink is used.

mxdz
The maximum I/O delay in microseconds for pages in the data set when zHyperLink is used.

tpgz
The total number of pages that are read or written for the data set when zHyperLink is used.

Related information:

Read operations and prefetch I/O (Db2 Performance)

DSNB456I: Asynchronous I/O delay statistics

The output includes asynchronous I/O delay statistics if all of the following conditions are true:

- You specified the LSTATS option on the DISPLAY BUFFERPOOL command.
- The buffer pool is an active buffer pool.
- The values of the asynchronous I/O delay statistics are not zero.

These asynchronous I/O delay statistics are reported for a data set for an open table space or index space that is associated with the buffer pool. The values that are listed are the statistics that were gathered since the last display for the data set.

The relevant table space or index space is identified in either line DSNB464I or line DSNB465I. The relative data set within the table space or index space is identified in line DSNB466I.

```
DSNB456I - ASYNCHRONOUS I/O DELAYS -
             AVERAGE DELAY         = avd
             MAXIMUM DELAY         = mxd
             TOTAL PAGES           = tpg
             TOTAL I/O COUNT       = tio
```

avd
The average I/O delay in milliseconds for pages in the data set.

mxd
The maximum I/O delay in milliseconds for pages in the data set.

tpg
The total number of pages that are read or written for the data set.

tpg
The total number of I/O operations that are issued for the data set.

DSNB457I: Simulated buffer pool page statistics

The output includes the number of simulated pages in the simulated buffer pool for a data set if all of the following conditions are true:

- You specified the LSTATS option on the DISPLAY BUFFERPOOL command.
- The buffer pool is an active buffer pool.
- The number of simulated pages in the simulated buffer pool is not zero.

The relevant table space or index space is identified in either line DSNB464I or line DSNB465I. The data set is identified in line DSNB466I.

```
DSNB457I - NUMBER OF PAGES IN THE SIMULATED
BUFFER POOL -
           CURRENT       =         scount
MAX           =         mscount
```

CURRENT = *scount*
The number of pages from the data set that are currently simulated in the simulated buffer pool.

MAX = *mscount*
The maximum number of pages from the data set that have been simulated in the simulated buffer pool since the last DISPLAY BUFFERPOOL command with the LSTATS option was issued.

DSNB459I: Open failure for a data set

Message DSNB459I indicates that a previous attempt to access a data set failed because of an allocation or open error. This message is displayed only when you specify the LIST option on the DISPLAY BUFFERPOOL command for an active buffer pool and this error condition occurs.

The relevant table space or index space is identified in either line DSNB464I or line DSNB465I.

```
DSNB459I - csect-name OPEN FAILURE HAS OCCURRED
FOR DATASET dsn
```

csect-name
The name of the control section that issued the message.

DATASET = *dsn*
The data set number. This value is the relative data set number within a table space or index space.

Other data set and buffer pool information might be displayed in subsequent messages.

DSNB460I: Page set and partition list information (for a data-sharing environment)

When you specify the LIST option, the output includes information about page sets and partition lists.

The message output begins with the introductory text PAGE SET/PARTITION LIST INFORMATION. The introductory text is followed by column headers and multiple lines of information.

```
DSNB460I  @
----------------PAGE SET/PARTITION LIST
INFORMATION---------------
                                      --------DATA
SHARING INFO--------
                                  TS GBP  MEMBER
CASTOUT  USE  P-LOCK
DATABASE SPACE NAME  INST PART IX DEP   NAME
OWNER  COUNT STATE
======== =========== ==== ==== == === ========
======= ===== ======
```

The output contains the following columns, in the indicated order:

DATABASE
The name of the database. This field is blank when the line provides information about the same database as the preceding line or lines.

SPACE NAME
The name of the table space. This field is blank when the line provides information about the same table space as the preceding line or lines.

INST
The instance number.

PART
One of the following values:

- The partition number.
- For a simple table space or simple index space: a blank.
- For non-partitioned indexes on a partitioned table space: the logical partition number preceded by the character L (for example, L01).

TS IX
The type of object: either TS for table space or IX for index space.

GBP DEP
An indicator of group buffer pool (GBP) dependency. The indicator can be either of the following values:

Y
The page set or partition is GBP-dependent.

N
The page set or partition is not GBP-dependent.

MEMBER NAME
The name of the member that the detail line pertains to.

CASTOUT OWNER
An indicator of whether the member is the castout owner. The indicator can be either of the following values:

Y
The member is the castout owner.

Blank
The member is not the castout owner.

USE COUNT
The number of active claimers or drainers for the page set or partition for the member.

P-LOCK STATE
The P-lock state that the member currently holds. The state can be any of the following values:

IS
R/O interest. Other members have interest in this page set or partition. The page set or partition is GBP-dependent.

IX
R/W interest. Other members have interest in this page set or partition. The page set or partition is GBP-dependent.

S
R/O interest. Other members might be reading the page set or partition. The page set or partition is not GBP-dependent.

SIX
R/W interest. Other members might be reading the page set or partition. The page set or partition is GBP-dependent.

NSU
R/W interest. The page set or partition is GBP-dependent.

X
R/W interest. No other members are accessing the page set or partition. The page set or partition is not GBP-dependent.

US
A temporary state that can be held by a restarting Db2 when "waiting for retained locks" is enabled.

number
A number for use as a diagnostic aid. A number is displayed only when a DISPLAY

BUFFERPOOL command encounters an undefined lock state.

If the DISPLAY BUFFERPOOL LIST command finds more than 255 lines of output to display, the output is presented in multiple sections. Each section is a new instance of message DSNB460I with the addition of "(CONTINUED)" in the message heading:

```
DSNB460I  @ (CONTINUED)
```

Message DSNB460I is issued in a data-sharing environment. In a non-data-sharing environment, message DSNB464I is issued instead.

If no information is available, message DSNB460I is followed by message DSNB463I.

DSNB463I: No objects matched selection criteria

Message DSNB463I indicates that Db2 did not find any page sets or partitions that matched the selection criteria.

```
DSNB463I - * * * NO OBJECTS MATCHED LIST/LSTATS
SELECTION CRITERIA
```

For example, this message is displayed for DIS BPOOL(BP0) GBPDEP(Y) if Db2 did not find any page sets or partitions that are group-buffer-pool dependent (GBP-dependent).

When message DSNB463I is returned, the DISPLAY BUFFERPOOL command terminates normally.

If you expected to see a list of page sets or partitions, review and correct the syntax of the DISPLAY BUFFERPOOL command as needed. Consider adding or changing the filter keywords to obtain a list of page sets or partitions.

DSNB464I: Page set and partition list information (for a non-data-sharing environment)

When you specify the LIST option, the output includes information about page sets and partition lists.

The message output begins with the introductory text `PAGE SET/PARTITION LIST INFORMATION`. The introductory text is followed by column headers and multiple lines of information.

```
DSNB464I  @
PAGE SET/PARTITION LIST INFORMATION
                                    TS  USE
DATABASE SPACE NAME  INST PART IX COUNT
======== =========== ==== ==== == =====
```

DATABASE
The name of the database. This field is blank when the line provides information about the same database as the preceding line or lines.

SPACE NAME
The name of the table space. This field is blank when the line provides information about the same table space as the preceding line or lines.

INST
The instance number.

PART
One of the following values:

- The partition number.
- For a simple table space or simple index space, a blank.
- For non-partitioned indexes on a partitioned table space, the logical partition number preceded by the character L (for example, L01).

TS IX
The type of object: either TS for table space or IX for index space.

USE COUNT
The number of active claimers or drainers for the page set or partition for the member.

If the DISPLAY BUFFERPOOL LIST command finds more than 255 lines of output to display, the output is presented in multiple sections. Each section is a new instance of message DSNB464I with the addition of "(CONTINUED)" in the message heading:

```
DSNB464I  @ (CONTINUED)
```

Message DSNB464I is issued in a non-data-sharing environment. In a data-sharing environment, message DSNB460I is issued instead.

If no information is available, message DSNB464I is followed by message DSNB463I.

DSNB466I: Page set and partition statistics

When you specify the LSTATS option, the output includes statistics for data sets. Those statistics are introduced by message DSNB466I.

DSNB467I: Data set statistics

When you specify the LSTATS option, the output includes statistics about data sets for objects that are associated with active buffer pools.

```
DSNB467I - STATISTICS FOR object-type database-
name.space-name INSTANCE instance-number -
DATA SET #: set-number USE COUNT: application-
count
```

STATISTICS FOR *object-type*
The type of object: either TABLE SPACE or INDEX SPACE.

database-name
The name of the database.

space-name
The name of the table space or index space.

instance-number
The instance number of the table space or index space.

DATA SET #: *set-number*
The relative data set number within the table space or index space.

USE COUNT: *application-count*
The number of applications that have a claim or drain on the page set or partition.

This message is followed by one or more of the following messages: DSNB453I, DSNB455I, or DSNB456I.

Related information:

Claims and drains (Db2 Performance)

DSNB546I: Frame size allocation

Message DSNB546I describes the frame size allocation status of the buffer pool. If the specified number of buffers with the specified frame size are not available, Db2 allocates some of the buffers with a different frame size. In that case, Db2 issues multiple instances of this message to show the number of buffers that are allocated with each frame size.

```
DSNB546I - PREFERRED FRAME SIZE preferred-size
buffer-count BUFFERS USING frame-size FRAME
SIZE ALLOCATED
```

preferred-size
The requested frame size. If you used the ALTER BUFFERPOOL command with the FRAMESIZE option, the specified FRAMESIZE value is displayed as *preferred-size*.

This value can be 4K, 1M, or 2 GB.

buffer-count
The number of buffers that are allocated with the *frame-size* value. This value might include storage frames that have been logically removed from the buffer pool, but which Db2 cannot yet free.

frame-size
The actual frame size that Db2 used for the buffers.

This value can be 4K, 1M, or 2 GB.

DSN9022I: Normal completion

The DISPLAY THREAD output normally ends with message DSN9022I.

Related information:

"DSN9022I" on page 1162

DSNB499I: Display terminated because of insufficient space

If the DISPLAY BUFFERPOOL output is too long, the output ends with message DSNB499I. This message indicates that the command was unable to obtain storage for more messages. This situation occurs only for a long display request, such as a detail display for many buffer pools.

The output is truncated.

Reissue the DISPLAY BUFFERPOOL command, and specify a smaller number of buffer pools.

System action

Processing continues.

Related tasks

Monitoring buffer pools (Db2 Administration Guide)

Monitoring and tuning buffer pools by using online commands (Db2 Performance)

Related reference

-DISPLAY BUFFERPOOL (Db2) (Db2 Commands)

-ALTER BUFFERPOOL (Db2) (Db2 Commands)

DSNB402I

BUFFER POOL SIZE = *pool-size* BUFFERS AUTOSIZE = *autosize* VPSIZE MINIMUM = *minimum size* VPSIZE MAXIMUM = *maximum-size* ALLOCATED = *allocated-buffers* TO BE DELETED = *delete-buffers* IN-USE/UPDATED = *current-buffers*

Explanation

This message is a section of output from the DISPLAY BUFFERPOOL command, which is part of message "DSNB401I" on page 68.

DSNB404I

THRESHOLDS — VP SEQUENTIAL = *vpseq* SP SEQUENTIAL = *spseq* DEFERRED WRITE = *dwt* VERTICAL DEFERRED WRT = *dwv1,dwv2* PARALLEL SEQUENTIAL = *vppseqt* ASSISTING PARALLEL SEQT = *vpxpseqt*

Explanation

This message is a section of output from the DISPLAY BUFFERPOOL command, which is part of message "DSNB401I" on page 68.

DSNB406I **PGFIX ATTRIBUTE - CURRENT = *current-pgfix* PENDING = *pending-pgfix* PAGE STEALING METHOD = *current-pgsteal***

Explanation

This message is a section of output from the DISPLAY BUFFERPOOL command, which is part of message "DSNB401I" on page 68.

DSNB408I **NO DETAIL STATISTICS AVAILABLE FOR BUFFER POOL *bp-name***

Explanation

This message is part of the output from the DISPLAY BUFFERPOOL command, which is part of message "DSNB401I" on page 68.

DSNB409I **INCREMENTAL STATISTICS SINCE *base-time***

Explanation

This message is part of the output from the DISPLAY BUFFERPOOL command, which is part of message "DSNB401I" on page 68.

DSNB410I **CUMULATIVE STATISTICS SINCE *base-time***

Explanation

This message is part of the output from the DISPLAY BUFFERPOOL command, which is part of message "DSNB401I" on page 68.

DSNB411I **RANDOM GETPAGE = *rgp* SYNC READ I/O (R) = *srr* SYNC READ I/O (ZHL) = *srrz* SEQ. GETPAGE = *sgp* SYNC READ I/O (S) = *srs* DMTH HIT = *dmt* PAGE-INS REQ = *pir* SEQUENTIAL = *seq* VPSEQT HIT = *vsh* RECLASSIFY = *rcy***

Explanation

This message is a section of output from the DISPLAY BUFFERPOOL command, which is part of message "DSNB401I" on page 68.

DSNB412I **SEQUENTIAL PREFETCH - REQUESTS = *pft* PREFETCH I/O = *pio* PAGES READ = *pfp***

Explanation

This message is a section of output from the DISPLAY BUFFERPOOL command, which is part of message "DSNB401I" on page 68.

DSNB413I **LIST PREFETCH - REQUESTS = *pft* PREFETCH I/O = *pio* PAGES READ = *pfp***

Explanation

This message is a section of output from the DISPLAY BUFFERPOOL command, which is part of message "DSNB401I" on page 68.

DSNB414I **DYNAMIC PREFETCH - REQUESTS = *pft* PREFETCH I/O = *pio* PAGES READ = *pfp***

Explanation

This message is a section of output from the DISPLAY BUFFERPOOL command, which is part of message "DSNB401I" on page 68.

DSNB415I **PREFETCH DISABLED - NO BUFFER = *pfd* NO READ ENGINE = *ree***

Explanation

This message is a section of output from the DISPLAY BUFFERPOOL command, which is part of message "DSNB401I" on page 68.

DSNB420I **SYS PAGE UPDATES = *pages-updated* SYS PAGES WRITTEN = *pages-written* ASYNC WRITE I/O = *async-writes* SYNC WRITE I/O = *sync-writes* PAGE-INS REQUIRED = *page-ins***

Explanation

This message is a section of output from the DISPLAY BUFFERPOOL command, which is part of message "DSNB401I" on page 68.

DSNB421I **DWT HIT= *dwt* VERTICAL DWT HIT=*vdw***

Explanation

This message is a section of output from the DISPLAY BUFFERPOOL command, which is part of message "DSNB401I" on page 68.

DSNB431I **SIMULATED BUFFER POOL SIZE = *pool-size* BUFFERS ALLOCATED = *allocated-buffers* IN-USE = *current-buffers* HIGH IN-USE =**

high-in-use* SEQ-IN-USE = *current-sequential-buffers* HIGH SEQ-IN-USE = *high-sequential-buffers

Explanation

This message is a section of output from the DISPLAY BUFFERPOOL command, which is part of message "DSNB401I" on page 68.

DSNB432I **- SIMULATED BUFFER POOL ACTIVITY -**

Explanation

This message is a section of output from the DISPLAY BUFFERPOOL command, which is part of message "DSNB401I" on page 68.

Related concepts

Buffer pool simulation results (Db2 Performance)

Related reference

-DISPLAY BUFFERPOOL (Db2) (Db2 Commands)

DSNB440I **PARALLEL ACTIVITY — PARALLEL REQUEST = *tpa* DEGRADED PARALLEL = *dpa***

Explanation

This message is a section of output from the DISPLAY BUFFERPOOL command, which is part of message "DSNB401I" on page 68.

DSNB441I **LPL ACTIVITY - PAGES ADDED = *pages***

Explanation

This message is a section of output from the DISPLAY BUFFERPOOL command, which is part of message "DSNB401I" on page 68.

DSNB453I **VP CACHED PAGES - CURRENT = *vcount* MAX = *mvcount* CHANGED = *ccount* MAX = *mccount***

Explanation

This message is a section of output from the DISPLAY BUFFERPOOL command, which is part of message "DSNB401I" on page 68.

DSNB455I **SYNCHRONOUS I/O DELAYS — AVERAGE DELAY = *avd* MAXIMUM DELAY = *mxd* TOTAL PAGES = *tpg* SYNCHRONOUS I/O DELAYS WITH ZHYPERLINK — AVERAGE DELAY = *avdz* MAXIMUM DELAY = *mxdz* TOTAL PAGES = *tpgz***

Explanation

This message is a section of output from the DISPLAY BUFFERPOOL command, which is part of message "DSNB401I" on page 68.

DSNB456I **ASYNCHRONOUS I/O DELAYS — AVERAGE DELAY = *avd* MAXIMUM DELAY = *mxd* TOTAL PAGES = *tpg* TOTAL I/O COUNT = *tio***

Explanation

This message is a section of output from the DISPLAY BUFFERPOOL command, which is part of message "DSNB401I" on page 68.

DSNB457I **NUMBER OF PAGES IN THE SIMULATED BUFFER POOL CURRENT = *scount* MAX = *mscount***

Explanation

This message is a section of output from the DISPLAY BUFFERPOOL command, which is part of message "DSNB401I" on page 68.

DSNB459I ***csect-name* OPEN FAILURE HAS OCCURRED FOR DATASET *dsn***

Explanation

This message is output from the DISPLAY BUFFERPOOL command, which is part of message "DSNB401I" on page 68.

DSNB460I **PAGE SET/PARTITION LIST INFORMATION**

Explanation

This message is a section of output from the DISPLAY BUFFERPOOL command, which is part of message "DSNB401I" on page 68.

DSNB463I *** * * NO OBJECTS MATCHED LIST/LSTATS SELECTION CRITERIA**

Explanation

This message is output from the DISPLAY BUFFERPOOL command, which is part of message "DSNB401I" on page 68.

DSNB464I **PAGE SET/PARTITION LIST INFORMATION**

Explanation

This message is a section of output from the DISPLAY BUFFERPOOL command, which is part of message "DSNB401I" on page 68.

DSNB466I **----------PAGE SET/ PARTITION STATISTICS----------**

Explanation

This message is a section of output from the DISPLAY BUFFERPOOL command, which is part of message "DSNB401I" on page 68.

DSNB467I **STATISTICS FOR *object-type database-name.space-name* INSTANCE *instance-number* DATA SET #: *set-number* USE COUNT: *application-count***

Explanation

This message is a section of output from the DISPLAY BUFFERPOOL command, which is part of message "DSNB401I" on page 68.

DSNB468I ***keyword* KEYWORD IS IGNORED FOR NON-DATA SHARING SYSTEMS**

Explanation

The identified keyword is valid only in a data-sharing environment. Keywords GBPDEP and CASTOWNR can cause this message to be displayed.

System action

The command ignores the keyword and terminates normally.

User response

Re-enter the command without the keyword since the Db2 is a non-data-sharing Db2.

DSNB469I ***keyword1* KEYWORD IS IGNORED WHEN *keyword2* KEYWORD IS SPECIFIED**

Explanation

keyword1 is incompatible with *keyword2*. For example, consider the following command:

```
DIS BPOOL(BP0) GBPDEP(Y) LSTATS(*)
```

The GBPDEP keyword requests a list of page sets or partitions (as in the LIST keyword); however, GBPDEP is ignored because LIST and LSTATS are two different reports.

System action

The command ignores *keyword1* and terminates normally.

User response

Omit *keyword1* if *keyword2* is used on the next entry of the command.

Related reference

-DISPLAY BUFFERPOOL (Db2) (Db2 Commands)

DSNB499I **DISPLAY TERMINATED DUE TO INSUFFICIENT MESSAGE SPACE**

Explanation

This message is included in the following output:

- Output from the DISPLAY BUFFERPOOL command, which is part of message "DSNB401I" on page 68
- Output from the DISPLAY GROUPBUFFERPOOL command, which is part of message "DSNB750I" on page 94

Related reference

-DISPLAY BUFFERPOOL (Db2) (Db2 Commands)

-DISPLAY GROUPBUFFERPOOL (Db2) (Db2 Commands)

DSNB501I ***bpname* IS NOT A VALID BUFFER POOL NAME**

Explanation

An invalid buffer pool name was specified on an ALTER BUFFERPOOL or DISPLAY BUFFERPOOL command. THE VALID NAMES ARE BP0, BP1,..., BP49, BP32K, BP32K1,...BP32K9.

System action

The request is rejected.

System programmer response

Reissue the ALTER BUFFERPOOL or DISPLAY BUFFERPOOL command, specifying a valid buffer pool name.

DSNB502I **ENCOUNTERED AN ERROR WHILE VALIDATING INPUT *vp-parm* FOR *bp-name* MUST BE BETWEEN *lower-limit* AND *upper-limit* .**

SPECIFIED VALUE IS *specified-value*.

Explanation

An ALTER BUFFERPOOL command was issued that specified incompatible values for one or more of the following options: VPSIZE, VPSIZEMIN, or VPSIZEMAX.

vp-parm
The option for which an incompatible value was specified. VPSIZE, VPSIZEMIN, VPSIZEMAX

bp-name
Buffer pool name.

lower-limit
Lower limit for the VPSIZE value for a buffer pool. The same limit applies to the VPSIZEMIN value for a buffer pool. For BP0, the lower limit is 2000. For BP8K0, the lower limit is 1000. For BP16K0, the lower limit is 500. For all other buffer pools, the lower limit is 0.

upper-limit
Upper limits for the VPSIZE of a buffer pool. The same limit applies to the VPSIZEMAX value for a buffer pool. The upper limit is based on the page-size of the buffer pool:

- 250000000 for 4KB page-size buffer pools
- 125000000 for 8KB page-size buffer pools
- 62500000 for 16KB page-size buffer pools
- 31250000 for 32KB page-size buffer pools

specified-value
The value that is specified for VPSIZE, VPSIZEMIN or VPSIZEMAX in the ALTER BUFFERPOOL command.

System action

The buffer pool is not modified.

System programmer response

Reissue the ALTER BUFFERPOOL command, and specify a valid value for compatible values for VPSIZE, VPSIZEMIN, and VPSIZEMAX.

Related reference
-ALTER BUFFERPOOL (Db2) (Db2 Commands)

DSNB504I **VPSEQT FOR *bpname* MUST BE BETWEEN 0 AND 100**

Explanation

An ALTER BUFFERPOOL command was issued to try to alter a buffer pool's VPSEQT attribute to an invalid value. VPSEQT is the buffer pool sequential steal threshold. Valid values range 0 - 100.

System action

The request is rejected.

System programmer response

Reissue the ALTER BUFFERPOOL command, specifying a legitimate VPSEQT value.

DSNB506I **DWQT FOR *bpname* MUST BE BETWEEN 0 AND 90**

Explanation

An attempt was made to change a buffer pool's DWQT attribute value using the ALTER BUFFERPOOL command. DWQT is the free buffer deferred write threshold. Valid values range 0 - 90.

System action

The request is rejected.

System programmer response

Reissue the ALTER BUFFERPOOL command, specifying a legitimate DWQT value.

DSNB507I **VDWQT FOR *bpname* MUST BE BETWEEN 0 AND 90**

Explanation

An attempt was made to change a buffer pool's VDWQT attribute to an invalid value using the ALTER BUFFERPOOL command. VDWQT is the vertical deferred write threshold. Valid values range 0 - 90.

System action

The request is rejected.

System programmer response

Reissue the ALTER BUFFERPOOL command, specifying a legitimate VDWQT value.

DSNB508I ***csect-name* THE TOTAL VPSIZE AND SPSIZE IS BEYOND THE MAXIMUM LIMIT**

Explanation

An ALTER BUFFERPOOL command specified a VPSIZE or SPSIZE value that would cause the sum of the *ssnm*DBM1 address space storage requirements for all buffer pools and simulated buffer pools to exceed 1TB. When calculating the storage requirements for

the buffer pools, Db2 uses the page size (4K, 8K, 16K, or 32K) for each pool buffer.

System action

The VPSIZE value or SPSIZE value for the buffer pool is not changed. Processing for other parameters proceeds normally.

System programmer response

Rebalance VPSIZE or SPSIZE for all buffer pools.

DSNB510I NO ACTION REQUESTED

Explanation

An ALTER BUFFERPOOL command was issued, but no buffer pool attributes were specified.

System action

The buffer pool's attributes are not changed.

System programmer response

Reissue the ALTER BUFFERPOOL command specifying one or more buffer pool attributes.

DSNB511I VDWQT CANNOT BE GREATER THAN DWQT

Explanation

An ALTER BUFFERPOOL command specified a DWQT and/or VDWQT value that would result in the buffer pool's VDWQT parameter being greater than its DWQT parameter.

System action

The buffer pool's VDWQT or DWQT is not changed. Processing for other parameters, if requested, proceeds normally.

System programmer response

Rebalance DWQT and VDWQT for the buffer pool.

DSNB512I *integer* IS THE CURRENT VPSIZE FOR BUFFER POOL *bpname*

Explanation

An ALTER BUFFERPOOL command specified a VPSIZE equal to the buffer pool's current buffer pool size.

System action

The buffer pool size is not changed. Processing for other parameters, if requested, proceeds normally.

DSNB514I *integer* IS THE CURRENT VPSEQT FOR BUFFER POOL *bpname*

Explanation

An ALTER BUFFERPOOL command specified an VPSEQT equal to the current sequential steal threshold of the buffer pool.

System action

The buffer pool sequential threshold is not changed. Processing for other parameters, if requested, proceeds normally.

DSNB516I *integer* IS THE CURRENT DWQT FOR BUFFER POOL *bpname*

Explanation

An ALTER BUFFERPOOL command specified a DWQT equal to the current deferred write threshold of the buffer pool.

System action

The deferred write threshold of the buffer pool is not changed. Processing for other parameters, if requested, proceeds normally.

DSNB517I *int1*,*int2* IS THE CURRENT VDWQT FOR BUFFER POOL *bpname*

Explanation

An ALTER BUFFERPOOL command specified a VDWQT equal to the current vertical deferred write threshold of the buffer pool.

System action

The vertical deferred write threshold of the buffer pool is not changed. Processing for other parameters, if requested, proceeds normally.

DSNB519I *csect-name* PGSTEAL FOR *bufferpool-name* HAS BEEN SET TO *new-pgsteal*.

Explanation

This message is issued in response to an ALTER BUFFERPOOL command to indicate that the requested change to the PGSTEAL parameter was accepted.

csect-name
The name of the control section that issued the message.

command-name
The name of the z/OS MVS command that was issued: START, STOP, or MODIFY. The MODIFY command refreshes the Db2 health monitor.

bufferpool-name
The name of the buffer pool.

new-pgsteal
The page stealing method (PGSTEAL) that will be used for the buffer pool.

LRU
The buffer pool buffers are managed using the least recently used (LRU) algorithm. This is the default option.

FIFO
The buffer pool buffers are managed using the first-in, first-out (FIFO) algorithm.

NONE
The buffer pool buffers are managed with the no-stealing algorithm. Objects that use this buffer pool are kept resident.

System action

Processing continues.

Related reference
-ALTER BUFFERPOOL (Db2) (Db2 Commands)

DSNB520I READY TO EXPLICITLY DELETE BUFFER POOL *bpname*

Explanation

This message is issued before draining an active buffer pool in response to an ALTER BUFFERPOOL command, which specified VPSIZE=0 against an active buffer pool.

System action

After this message is issued, Db2 quiesces all current activities against this buffer pool. Db2 locks the table space exclusively and performs physical close for all open table spaces or index spaces that reference this pool. Db2 also prevents subsequent database access that references this pool. SQL applications get an SQLCODE -904 (resource not available) with reason code 00C200E0 to indicate that the requested buffer pool size is not initialized. After the requested buffer pool is deleted, message DSNB521I is issued.

DSNB521I BUFFER POOL *bpname* HAS BEEN EXPLICITLY DELETED

Explanation

This message is issued after an active buffer pool is explicitly deleted with an ALTER BUFFERPOOL command. This message is always preceded by a corresponding DSNB520I message.

System action

The virtual storage that is associated with this buffer pool is released.

DSNB522I *specified-option* FOR *bp-name* HAS BEEN SET

Explanation

This message is issued in response to an ALTER BUFFERPOOL command to indicate that the requested change to the specified option was accepted. For an active pool, the actual expansion, contraction, or deletion does not take place until after this message is issued.

specified-option
One of the following options that was specified in the ALTER BUFFERPOOL command:

- VPSIZE
- SSIZE
- SPSEQT
- VPMIN (for VPSIZEMIN)
- VPMAX (for VPSIZEMAX)
- FRAME (for FRAMESIZE)

bp-name
The name of the buffer pool.

System action

Processing continues.

System programmer response

Issue the DISPLAY BUFFERPOOL command to determine the actual virtual storage usage for this pool.

Related reference
-ALTER BUFFERPOOL (Db2) (Db2 Commands)
-DISPLAY BUFFERPOOL (Db2) (Db2 Commands)

DSNB524I VPSEQT FOR *bpname* HAS BEEN SET TO *integer*

Explanation

This message is issued in response to an ALTER BUFFERPOOL command. It indicates the successful modification of the sequential steal threshold of the buffer pool.

DSNB526I **DWQT FOR *bpname* HAS BEEN SET TO *integer***

Explanation

This message is issued in response to an ALTER BUFFERPOOL command. It indicates the successful modification of the deferred write threshold of the buffer pool.

DSNB527I **VDWQT FOR *bpname* HAS BEEN SET TO *int1*,*int2***

Explanation

This message is issued in response to an ALTER BUFFERPOOL command. It indicates the successful modification of the vertical deferred write threshold of the buffer pool.

DSNB529I **VPPSEQT FOR *bpname* HAS BEEN SET TO *integer***

Explanation

This message is issued in response to the ALTER BUFFERPOOL command. It indicates the successful modification of the parallel sequential steal threshold of the buffer pool.

DSNB530I ***integer* IS THE CURRENT VPPSEQT FOR BUFFER POOL *bpname***

Explanation

An ALTER BUFFERPOOL command specified a VPPSEQT equal to the current parallel sequential steal threshold of the buffer pool.

System action

The parallel sequential steal threshold of the buffer pool is not changed. Processing for other parameters, if requested, proceeds normally.

DSNB531I **VPPSEQT FOR *bpname* MUST BE BETWEEN 0 AND 100**

Explanation

An ALTER BUFFERPOOL command was issued to alter a buffer pool's VPPSEQT attribute to an invalid value. VPPSEQT is the parallel sequential steal threshold of the buffer pool. Valid values range 0 - 100.

System action

The VPPSEQT value is not changed.

System programmer response

Change the VPPSEQT attribute to a valid value and reenter the command.

DSNB532I **VPXPSEQT FOR *bpname* HAS BEEN SET TO *integer***

Explanation

This message is issued from DSNB1ABP csect in response to the ALTER BUFFERPOOL command. It indicates the successful modification of the assisting parallel sequential threshold of the buffer pool.

DSNB533I ***integer* IS THE CURRENT VPXPSEQT FOR BUFFER POOL *bpname***

Explanation

An ALTER BUFFERPOOL command specified a VPXPSEQT equal to the current assisting parallel sequential threshold of the buffer pool.

System action

The assisting parallel sequential threshold of the buffer pool is not changed. Processing for other parameters, if requested, proceeds normally.

DSNB534I **VPXPSEQT FOR *bpname* MUST BE BETWEEN 0 AND 100**

Explanation

An ALTER BUFFERPOOL command was issued to change a buffer pool's VPXPSEQT attribute to an invalid value. VPXPSEQT is the assisting parallel sequential threshold of the virtual buffer pool. Valid values range 0 - 100. This message is issued from DSNB1ABP csect.

System action

The VPXPSEQT value is not changed.

System programmer response

Change the VPXPSEQT attribute to a valid value and reenter the command.

DSNB536I ***csect-name* THE TOTAL VIRTUAL BUFFER POOL STORAGE EXCEEDS THE REAL STORAGE CAPACITY**

Explanation

This message is issued as a warning that the total amount of allocated virtual buffer pool storage for this Db2 subsystem has exceeded the real storage

capacity of the z/OS image. The amount of real storage should be at least as much as the total amount of virtual buffer pool storage, and should also be enough to accommodate the EDM pool and Db2 working storage in addition to the virtual buffer pool storage. Paging activity in the buffers is an indication of a performance problem.

System action

Processing continues.

System programmer response

Allocate more real storage to the z/OS image. If there is not enough real storage to hold the buffers, then the number of buffers needs to be reduced. This might mean fewer concurrent users. If the number of buffers is reduced, then Db2 will issue the DSNB538I message when the total amount of virtual buffer pool storage no longer exceeds the real storage capacity.

DSNB538I ***csect-name*** **THE TOTAL BUFFER POOL STORAGE NO LONGER EXCEEDS THE REAL STORAGE CAPACITY**

Explanation

This message is issued following a previous DSNB536I message to indicate that the total amount of allocated buffer pool storage for this Db2 subsystem no longer exceeds the real storage capacity of the z/OS image.

System action

Processing continues.

DSNB539I ***csect-name*** **AUTOLPL FOR** ***bpname*** **HAS BEEN SET TO** ***value*****. IT WILL TAKE EFFECT ON THE NEXT ALLOCATION**

Explanation

Db2 issues this message in response to an ALTER BUFFERPOOL command to ind that the requested change to the AUTOLPL parameter was accepted. The new AUTOLPL value takes effect the next time the buffer pool is allocated.

bpname is the name of the buffer pool.

value is one of the following:

YES
Db2 automatically recovers pages that are in LPL status.

NO
Db2 does not automatically recover pages in LPL status. To recover the LPL page, perform one of the following actions:

- Issue the START DATABASE command with the SPACENAM option
- Run the RECOVER or LOAD utility

System action

Processing continues

DSNB540I ***csect-name*** **INSUFFICIENT LOCAL CACHE VECTOR STORAGE TO EXPAND BUFFER POOL** ***bpname*** **TO SPECIFIED SIZE** ***size1*****. BUFFER POOL SIZE IS NOW** ***size2*****.**

Explanation

The specified buffer pool could not be expanded to the requested size (*size1*). The associated group buffer pool is connected, and the local cache vector could not be expanded to cover the requested buffer pool size.

The local cache vector is a bit array which tracks whether the page in a given buffer was modified by another system (cross-invalidated). There must be one bit in the vector for each buffer in the buffer pool. For more information on the local cache vector, see *MVS/ESA Programming: Sysplex Services Reference*.

System action

Db2 downgrades the expansion request to the size that can be supported by the available local cache vector storage (*size2*).

System programmer response

Free local cache vector storage by contracting or deleting other buffer pools that are connected to a group buffer pool. Then reattempt the pool expansion by reissuing the ALTER BUFFERPOOL command.

DSNB541I ***csect-name*** **THE TOTAL ACTIVE PGFIX YES BUFFER POOL STORAGE EXCEEDS THE DB2 ALLOWED REAL STORAGE CAPACITY WHEN ALLOCATING STORAGE FOR BUFFER POOL** ***bpname*** **REAL STORAGE CAPACITY =** ***rsc*** **MB.**

Explanation

When allocating storage for a PGFIX YES buffer pool, Db2 detects that the total storage allocated for the PGFIX YES buffer pools will exceed 80% of the real

storage capacity on this z/OS image. The buffer pool name identified on this message (*bpname*) will be allocated with the PGFIX NO attribute. The real storage capacity of this z/OS image (*rsc*) is displayed in this message in units of megabytes (1 MB = 2**20 bytes).

System action

The buffer pool is created using the PGFIX NO attribute.

System programmer response

Either allocate more real storage to this z/OS image, reduce the requested size of the buffer pool or use the PGFIX NO attribute.

Related tasks

Fixing a buffer pool in real storage (Db2 Performance)

Related reference

-ALTER BUFFERPOOL (Db2) (Db2 Commands)

DSNB542I ***csect-name*** **THE TOTAL ACTIVE PGFIX YES BUFFER POOL STORAGE EXCEEDS THE DB2 ALLOWED REAL STORAGE CAPACITY WHEN EXPANDING STORAGE FOR BUFFER POOL** ***bpname*** **CURRENT VPSIZE =** ***cbpsize*** **NEW VPSIZE =** ***nbpsize*** **REAL STORAGE CAPACITY =** ***rsc*** **MB.**

Explanation

When expanding the VPSIZE for an active PGFIX YES buffer pool, Db2 detects that the total storage allocated for all active PGFIX YES buffer pools will exceed 80% of the real storage capacity on this z/OS image. The ALTER BUFFERPOOL command fails and the buffer pool will continue to be active with the current VPSIZE value.

The buffer pool attributes and real storage capacity are:

bpname
The buffer pool name.

cbpsize
The current VPSIZE for the buffer pool.

nbpsize
The new VPSIZE that was specified on the ALTER BUFFERPOOL command.

rsc
The real storage capacity of this z/OS image in units of megabytes (1 MB = 2**20 bytes).

System action

The ALTER BUFFERPOOL command fails. The buffer pool continues to be active with the current VPSIZE.

System programmer response

Either allocate more real storage to this z/OS image, reduce the requested size of the buffer pool or use the PGFIX NO attribute.

DSNB543I **THE PGFIX ATTRIBUTE IS ALTERED FOR BUFFER POOL** ***bp-name*** **CURRENT ATTRIBUTE =** ***cpgfix*** **NEW ATTRIBUTE =** ***npgfix*** **THE NEW ATTRIBUTE IS IN PENDING STATE.**

Explanation

An ALTER BUFFERPOOL command requested a change to the PGFIX attribute and the changes was accepted. The new value will take effect the next time the buffer pool is allocated.

bp-name
The buffer pool name.

current-attribute
The current PGFIX value for the buffer pool.

new-attribute
The new PGFIX value that was specified on the ALTER BUFFERPOOL command.

System action

Processing continues.

Related tasks

Fixing a buffer pool in real storage (Db2 Performance)

Choosing a page-stealing algorithm (Db2 Performance)

Related reference

-ALTER BUFFERPOOL (Db2) (Db2 Commands)

DSNB544I **AUTOSIZE FOR** ***bpname*** **HAS BEEN SET TO** ***nasize***

Explanation

This message is issued in response to an ALTER BUFFERPOOL command to indicate that the requested change to the AUTOSIZE attribute has been accepted.

bpname
The buffer pool name.

nasize
The new AUTOSIZE value specified in the ALTER BUFFERPOOL command, either YES or NO.

System action

Processing continues.

DSNB545I **FOR *bp-name*, VPSIZE *specified-value* NOT VALID WITH VPSIZEMIN *minimum-size* AND VPSIZEMAX *maximum-size*. VPSIZE MUST BE BETWEEN VPSIZEMIN AND VPSIZEMAX**

Explanation

An ALTER BUFFERPOOL command was issued that specified incompatible values for one or more of VPSIZE, VPSIZEMAX, or VPSIZEMIN. The value of VPSIZE must be greater than or equal to the value of VPSIZEMIN, and less than or equal to the value of VPSIZEMAX.

bp-name
The name of the buffer pool.

specified-value
The value that is specified for VPSIZE in the ALTER BUFFER POOL command or if no value was specified, the current value.

minimum-size
The value that is specified for VPSIZEMIN in the ALTER BUFFER POOL command or if no value was specified, the current value.

maximum-size
The value that is specified for VPSIZEMAX in the ALTER BUFFER POOL command or if no value was specified, the current value.

System action

The buffer pool is not modified.

User response

Reissue the ALTER BUFFERPOOL command, and specify compatible values for the VPSIZE, VPSIZEMIN and VPSIZEMAX options.

Related reference
-ALTER BUFFERPOOL (Db2) (Db2 Commands)

DSNB546I **PREFERRED FRAME SIZE *preferred-size buffer-count* BUFFERS USING *frame-size* FRAME SIZE ALLOCATED**

Explanation

This message is a section of output from the DISPLAY BUFFERPOOL command, which is part of message “DSNB401I” on page 68.

DSNB547I **SPSEQT FOR *bpname* MUST BE BETWEEN 0 AND 100**

Explanation

An ALTER BUFFERPOOL command was issued to alter a buffer pool's SPSEQT attribute to an invalid value. SPSEQT is the sequential steal threshold for the simulated buffer pool. Valid values range from 0 to 100.

The buffer pool attributes are:

bpname
The buffer pool name.

System action

The SPSEQT value is not changed.

System programmer response

Change the SPSEQT attribute to a valid value, and reenter the command.

DSNB551I **BSDS READ ERROR, RC= *integer*, RSN=*integer***

Explanation

This message is issued in response to a failure of a READ function on the bootstrap data set (BSDS). Users should check any previous error messages issued by MVS and Db2 against the corresponding BSDS. RC and RSN indicate an error return code and reason code from the BSDS function.

System action

Processing continues.

Operator response

Notify the system programmer.

System programmer response

Analyze the return and reason codes to determine what type of error occurred. Refer to message DSNJ107I for more information.

DSNB552I **BSDS WRITE ERROR, RC= *integer*, RSN= *integer***

Explanation

This message is issued in response to a failure of a WRITE function on the bootstrap data set (BSDS). Check any previous error messages issued by MVS and Db2 against the corresponding BSDS. RC and RSN

indicate an error return code and reason code from the BSDS function.

System action

Processing continues.

Operator response

Notify the system programmer.

System programmer response

Analyze the return and reason codes to determine what type of error occurred. Refer to message DSNJ108I for more information.

DSNB553I BSDS INSERT ERROR, RC= *integer*, RSN= *integer*

Explanation

This message is issued in response to a failure of an INSERT function on the bootstrap data set (BSDS). Check any previous error messages issued by MVS and Db2 against the corresponding BSDS. RC and RSN indicate an error return code and reason code from the BSDS function.

System action

Processing continues.

Operator response

Notify the system programmer.

System programmer response

Analyze the return and reason codes to determine what type of error occurred. For more information, refer to message DSNJ109I or other DSNJ messages related to BSDS.

DSNB555I WLM RECOMMENDATION TO ADJUST SIZE FOR BUFFER POOL *bpname* HAS COMPLETED OLD SIZE = *csize* BUFFERS NEW SIZE = *nsize* BUFFERS

Explanation

This message is issued when Workload Manager (WLM) notifies Db2 to adjust the size of a buffer pool. This recommendation is made based on WLM's dynamic monitoring of the effects of buffer pool I/O on the achievement of workload goals, and also on the amount of available storage on the system. This message is issued after the adjustment has completed.

bpname
The buffer pool name.

csize
The old size of the buffer pool.

nsize
The new size of the buffer pool.

System action

Processing continues.

DSNB601I BUFFER POOL *bpname* FULL

Explanation

A buffer is required to access a database page that is not currently contained within the buffer pool. A buffer cannot be assigned because all buffers in the buffer pool are in a nondisplaceable state. (Buffers are in a nondisplaceable state when they contain actively referenced pages or updated pages for which writes are pending.)

This message can occur if there is an overload of concurrent activity for the buffer pool size. The variable *bpname* is the buffer pool external name.

System action

Reason code 00C200E9 and the buffer pool external name are recorded in the cursor table (CT), which is available in the SQL communication area (SQLCA) or messages. An SQLCODE -904 (resource not available) is returned to the user.

Operator response

Notify the system programmer.

System programmer response

Do one of the following:

- Reduce concurrent activity by reducing the number of Db2 threads.
- Use the ALTER BUFFERPOOL command to increase the size of the buffer pool.

DSNB602I UNABLE TO CREATE BUFFER POOL *bpname*. BUFFER POOL SIZE IS ZERO

Explanation

An attempt to create the buffer pool failed while opening a Db2 table space or index that specified its use. The buffer pool size for *bpname* was zero. This indicates that the use of the pool is invalid.

System action

Reason code 00C200E0 and the buffer pool external name are recorded in the cursor table (CT), which is available in the SQL communication area (SQLCA) or messages. An SQLCODE -904 (resource not available) is returned to the user.

Operator response

Notify the system programmer.

System programmer response

Use the ALTER TABLESPACE or ALTER INDEX statement to modify affected table spaces or indexes to indicate a usable buffer pool. Use the DISPLAY BUFFERPOOL command to determine a usable buffer pool. If necessary, use the ALTER BUFFERPOOL command to activate the failing buffer pool by setting its VPSIZE to a nonzero value.

DSNB603I **INSUFFICIENT STORAGE TO CREATE/EXPAND BUFFER POOL *bpname* TO SPECIFIED SIZE *integer*. BUFFER POOL SIZE IS NOW *integer*.**

Explanation

A buffer pool could not be created or expanded to the requested size. Insufficient storage exists within the *ssnm*DBM1 address space to build the buffer pool. The buffer pool size is set by the ALTER BUFFERPOOL command and can be queried by using the DISPLAY BUFFERPOOL command.

System action

The buffer pool is created or expanded to the size allowed by the available storage. If the buffer pool cannot be created at all, and the creation request was triggered by a page set open by an application, then an SQLCODE -904 (resource not available) is returned to the user. Reason code 00C200E8 and the buffer pool external name are recorded in the cursor table (CT), which is available in the SQL communication area (SQLCA) or messages.

Operator response

Notify the system programmer.

System programmer response

Analyze the storage content of the *ssnm*DBM1 address space to determine further action. If appropriate, use the ALTER TABLESPACE or ALTER INDEX statement to use a different buffer pool. Otherwise, use ALTER BUFFERPOOL commands to balance storage use for all buffer pools.

DSNB605I **UNABLE TO CREATE BUFFER POOL *bpname* TO SPECIFIED SIZE DURING STARTUP/RESTART. INSUFFICIENT VIRTUAL STORAGE**

Explanation

An attempt to create the buffer pool failed at the time that Db2 was performing its startup or restart processing. Insufficient virtual storage exists within the *ssnm*DBM1 address space for building the buffer pool. The name of the buffer pool is *bpname*.

System action

The buffer pool is not created. The table space or index open request, which triggered the attempt to create the buffer pool, fails. An SQLCODE -904 (resource not available) is returned to the user. Reason code 00C200E8 and the buffer pool external name are recorded in the cursor table (CT), which is available in the SQL communication area (SQLCA) or messages.

This message is non-scrollable. It remains highlighted on the console until you take the appropriate action.

Operator response

Notify the system programmer. This message remains on the console until the operator deletes it.

System programmer response

Analyze the virtual storage content of the DSNDBM1 *ssnm*DBM1 address space to determine further action. If appropriate, use ALTER BUFFERPOOL commands to balance virtual storage use for all buffer pools.

DSNB609I **VIRTUAL BUFFER POOL *bpname* CREATED USING DEFAULT SIZE DURING STARTUP/RESTART. VIRTUAL BUFFER POOL SIZE IS ZERO**

Explanation

While activating a buffer pool during Db2 startup or restart processing, the buffer pool size was zero. A zero value might be caused by an unusable bootstrap data set (BSDS) or by a Db2 abnormal termination after buffer pool size was altered to zero. The name of the buffer pool is *bpname*.

System action

Db2 creates the buffer pool using the startup restart default value.

This message is non-scrollable. It remains highlighted on the console until you take the appropriate action.

Operator response

Notify the system programmer. This message remains on the console until deleted by the operator.

System programmer response

Use the ALTER TABLESPACE or ALTER INDEX statement to modify the affected table spaces or indexes to indicate a usable buffer pool. To determine a usable buffer pool, use the DISPLAY BUFFERPOOL command. If necessary, use the ALTER BUFFERPOOL command to activate the failing buffer pool by setting the VPSIZE to a nonzero value.

DSNB610I ***csect-name*** **MAXIMUM ALLOCATABLE BUFFER POOL STORAGE OF *int1*MB HAS BEEN REACHED. UNABLE TO CREATE/ EXPAND BUFFER POOL *bp-name* TO SPECIFIED SIZE *int2*. BUFFER POOL IS NOW *int3***

Explanation

A buffer pool could not be created or expanded to the requested size. The maximum amount of allowable buffer pool storage, indicated by *int1*, has been reached. The maximum allowable buffer pool storage is calculated to be twice the amount of real storage that is available on the z/OS image, or 1TB, whichever is less.

bpname
Indicates the name of the buffer pool that was affected.

int2
Indicates the size of the buffer pool that was requested.

int3
Indicates the actual size of the buffer pool that was created/expanded.

System action

The buffer pool is created or expanded to the size allowed by the available storage within the maximum. If the maximum has already been reached, then the buffer pool is allocated at a minimum size as follows:

- 2,000 pages for 4K page size
- 1,000 pages for 8K page size
- 500 pages for 16K page size
- 250 pages for 32K page size

Once the maximum has been reached, buffer pool sizes are not allowed to be increased.

System programmer response

Analyze the buffer pool sizes and determine if any can be decreased, or consider adding more memory.

DSNB612I ***csect-name*** **THE MAXIMUM AMOUNT OF BUFFER POOL STORAGE HAS BEEN ALLOCATED. THE SIMULATED BUFFER POOL CANNOT BE CREATED OR EXPANDED. BUFFER POOL *bpname*, MAXIMUM STORAGE *maximum-storage* MB, STORAGE NEEDED *storage-needed* MB.**

Explanation

A simulated buffer pool could not be created or expanded to the requested size. The maximum amount of virtual storage for buffer pools and simulated buffer pools was reached. That value is twice the amount of real storage that is available on the z/OS image, or 1TB, whichever is less.

bpname
The name of the buffer pool that is to be simulated.

maximum-storage
The maximum amount of virtual storage for buffer pools and simulated buffer pools that is allowed.

storage-needed
The amount of virtual storage for buffer pools and simulated buffer pools that is needed before the simulated buffer pool can be created or expanded.

System action

The simulated buffer pool is not created or expanded.

System programmer response

Issue DISPLAY BUFFERPOOL to obtain information about the buffer pool sizes. Analyze the existing buffer pool sizes, and the simulated buffer pool sizes that are needed. Take one of the following actions:

- Determine if any other buffer pool sizes can be decreased.
- Add more real memory, so that the virtual memory size can be increased.

DSNB613I ***csect-name*** **INSUFFICIENT VIRTUAL STORAGE TO CREATE OR EXPAND THE SIMULATED BUFFER**

POOL FOR *bpname*. REQUESTED SIMULATED BUFFER POOL SIZE REQUIRES *virtual-storage-size* MB.

Explanation

A simulated buffer pool could not be created or expanded to the requested size. Insufficient storage exists in the *ssnm*DBM1 address space to build the simulated buffer pool.

bpname
The name of the buffer pool that is to be simulated.

virtual-storage-size
The amount of virtual storage, in MB, that is needed to create or expand a simulated buffer pool of the requested size.

System action

The simulated buffer pool is not created or expanded.

System programmer response

Take one of the following actions:

- Specify a smaller simulated buffer pool size to reduce the amount of storage that the simulated buffer pool uses.
- Increase the amount of virtual storage that the *ssnm*DBM1 address space uses.

DSNB614I ***csect-name* SPSIZE FOR *bpname* HAS BEEN SET TO ZERO BECAUSE PGSTEAL *pgsteal-value* IS NOT COMPATIBLE WITH A SIMULATED BUFFER POOL.**

Explanation

An ALTER BUFFERPOOL command was issued for one of the following reasons:

- To change the PGSTEAL value for the buffer pool
- To change the SPSIZE value for the simulated buffer pool

The PGSTEAL value is incompatible with the SPSIZE value. The PGSTEAL value must be LRU for a simulated buffer pool.

bpname
The name of the buffer pool that is to be simulated.

pgsteal-value
The invalid PGSTEAL value.

System action

SPSIZE is set to zero. If the simulated buffer pool was previously allocated, it is deleted.

System programmer response

To create the simulated buffer pool, issue the ALTER BUFFERPOOL command with a non-zero SPSIZE value, and a PGSTEAL value of LRU.

DSNB740I ***csect-name* ATTEMPTING TO ESTABLISH DUPLEXING FOR GROUP BUFFER POOL *gbpname* REASON = *reason***

Explanation

Db2 has been requested to establish duplexing for the named group buffer pool. *reason* indicates the reason why duplexing was initiated. *reason* can be one of the following:

OPERATOR
The operator initiated a SETXCF command to initiate duplexing.

POLICY
The currently active CFRM policy indicated that duplexing should be automatically established for the group buffer pool.

This message is issued by each Db2 member participating in establishing duplexing.

System action

The Db2 members that are actively connected to the named group buffer pool participate in establishing duplexing for the group buffer pool. Access to the group buffer pool is quiesced while duplexing is being established.

DSNB741I ***csect-name* DUPLEXING COULD NOT BE ESTABLISHED FOR GROUP BUFFER POOL *gbpname* REASON = *reason***

Explanation

Db2 was unable to establish duplexing for the named group buffer pool. *reason* indicates the Db2 reason code indicating why duplexing could not be established.

System action

The group buffer pool goes back to simplex mode.

System programmer response

See the explanation for the reason code given.

DSNB742I ***csect-name*** **DUPLEXING HAS BEEN SUCCESSFULLY ESTABLISHED FOR GROUP BUFFER POOL** ***gbpname***

Explanation

The process to establish duplexing for the named group buffer pool has successfully completed.

This message is preceded by message DSNB740I which indicates the reason why duplexing was initiated. This message is issued by each Db2 member participating in establishing duplexing.

System action

Processing of mainline requests is resumed for the group buffer pool. Writes of changed pages to the group buffer pool will be duplexed writes from this point forward.

DSNB743I ***csect-name*** **DUPLEXING IS BEING STOPPED FOR GROUP BUFFER POOL** ***gbpname*** **FALLING BACK TO PRIMARY REASON =** ***reason1*** **DB2 REASON CODE =** ***reason2***

Explanation

Duplexing is being stopped for the named group buffer pool. To stop the duplexing, the secondary group buffer pool will be deallocated, and Db2 will go back to simplex mode on the primary group buffer pool.

reason1 indicates why duplexing was stopped:

OPERATOR
The operator initiated an MVS command to stop duplexing.

POLICY
A new CFRM policy has been activated which specifies DUPLEX(DISABLED) for the group buffer pool.

LOSSCONNSEC
One or more of the Db2 members lost connectivity to the secondary group buffer pool structure.

STRFAILSEC
The secondary group buffer pool structure failed.

DB2REASON
Db2 decided to stop duplexing. The reason code given in *reason2* indicates why Db2 stopped duplexing.

DUPCONNCHG
Duplexing rebuild stopped because of insufficient connectivity due to a change in the set of connectors.

If *reason1* indicates 'DB2REASON', then *reason2* specifies a Db2 reason code that indicates why Db2 stopped duplexing. If *reason1* is not 'DB2REASON', then *reason2* is zero.

This message is issued by each Db2 member connected to the duplexed group buffer pool.

System action

The secondary group buffer pool structure is discarded, and Db2 enters back into simplex mode on the primary group buffer pool structure. If DUPLEX(AUTO) is specified in the active CFRM policy for the group buffer pool, then duplexing will be automatically reinitiated, if duplexing is still possible.

System programmer response

If the rebuild stopped because of "DB2REASON", see the explanation for the reason code given. If duplexing is not automatically reinitiated and duplexing is needed for the group buffer pool, then use the MVS SETXCF command to reestablish duplexing.

DSNB744I ***csect-name*** **DUPLEXING IS BEING STOPPED FOR GROUP BUFFER POOL** ***gbpname*****, SWITCHING TO SECONDARY REASON =** ***reason1*** **DB2 REASON CODE =** ***reason2***

Explanation

Duplexing is being stopped for the named group buffer pool. To stop the duplexing, the primary group buffer pool will be deallocated, and Db2 will switch to the secondary group buffer pool to go back to simplex mode.

reason1 indicates why duplexing was stopped:

OPERATOR
The operator initiated an MVS command to stop duplexing.

POLICY
A new CFRM policy has been activated which specifies DUPLEX(DISABLED) for the group buffer pool.

LOSSCONNPRI
One or more of the Db2 members lost connectivity to the primary group buffer pool structure.

STRFAILPRI
The primary group buffer pool structure failed.

DB2REASON
Db2 decided to stop duplexing. The reason code given in *reason2* indicates why Db2 stopped duplexing.

If *reason1* indicates 'DB2REASON', then *reason2* specifies a Db2 reason code that indicates why Db2 stopped duplexing. If *reason1* is not 'DB2REASON', then *reason2* is zero.

This message is issued by each Db2 member connected to the duplexed group buffer pool.

System action

The primary group buffer pool structure is discarded, and Db2 enters back into simplex mode on the secondary group buffer pool structure. If DUPLEX(ENABLED) is specified in the active CFRM policy for the group buffer pool, then duplexing will be automatically reinitiated, if duplexing is still possible.

System programmer response

If the rebuild stopped because of "DB2REASON", see the explanation for the reason code given. If duplexing is not automatically reinitiated and duplexing is needed for the group buffer pool, then use the MVS SETXCF command to reestablish duplexing.

DSNB745I ***csect-name*** **THE TRANSITION BACK TO SIMPLEX MODE HAS COMPLETED FOR GROUP BUFFER POOL** ***gbpname***

Explanation

The named group buffer pool has completed the transition from duplex mode back to simplex mode.

This message is preceded either by message DSNB743I or by message DSNB744I which indicates the reason why duplexing was stopped. This message is issued by each Db2 member connected to the group buffer pool.

System action

The group buffer pool is now back in simplex mode which means that writes of changed pages to the group buffer pool are now simplexed. If DUPLEX(ENABLED) is specified in the active CFRM policy for the group buffer pool, then duplexing will be automatically reinitiated, if duplexing is still possible. This would mean that the group buffer pool is only temporarily back into simplex mode (it is soon to be entered back into duplex mode).

DSNB749I **GBPCACHE NO IS NOT ALLOWED FOR GROUP BUFFER POOL** ***gbpname*** **BECAUSE IT IS DUPLEXED**

Explanation

This message is issued in response to an ALTER GROUPBUFFERPOOL command that requests a change of the GBPCACHE attribute from YES to NO, but because the group buffer pool is duplexed, the change from YES to NO is not allowed.

System action

The request to change from GBPCACHE(YES) to GBPCACHE(NO) is rejected.

System programmer response

GBPCACHE(NO) and duplexing are mutually exclusive. If you want GBPCACHE(NO), then you must put the group buffer in simplex mode before specifying GBPCACHE(NO). To put a duplexed group buffer pool in simplex mode, do any of the following procedures:

- Activate a new CFRM policy that specifies DUPLEX(DISABLED) for the group buffer pool. This is the preferred method if you do not intend to duplex the group buffer pool again for awhile.
- Ensure that DUPLEX(AUTO) is not specified in the active CFRM policy for the group buffer pool, and then issue the MVS command SETXCF STOP,REBUILD,DUPLEX.

DSNB750I **DISPLAY FOR GROUP BUFFER POOL** ***gbpname*** **FOLLOWS**

Explanation

This message displays output from the DISPLAY GROUPBUFFERPOOL command.

Related information:

-DISPLAY GROUPBUFFERPOOL (Db2) (Db2 Commands)
Group buffer pool monitoring with the DISPLAY GROUPBUFFERPOOL command (Db2 Data Sharing Planning and Administration)

For each qualifying group buffer pool, one of the following two messages is displayed:

DSNB750I

`DSNB750I DISPLAY FOR GROUP BUFFER POOL` *`gbpname`* `FOLLOWS`

Message DSNB750I is displayed if Db2 was able to access information for the group buffer pool in the z/OS coupling facility resource management (CFRM) administrative policy.

gbpname
The name of the group buffer pool.

DSNB751I

```
DSNB751I MVS CFRM POLICY INFORMATION
NOT AVAILABLE FOR GROUP BUFFER POOL
gbpname MVS IXCQUERY RETURN CODE =
retcode MVS IXCQUERY REASON CODE =
reason A PARTIAL DISPLAY FOLLOWS
```

Message DSNB751I is displayed if Db2 could not retrieve the z/OS CFRM administrative policy information for the group buffer pool. Either the z/OS query request (IXCQUERY) did not successfully complete, or the backing structure for the group buffer pool is not defined in the z/OS CFRM administrative policy. Therefore, the information that is displayed for the group buffer pool is incomplete. For example, if the IXCQUERY request did not complete successfully, a connection list is not displayed, even if the CONNLIST option was specified on the DISPLAY GROUPBUFFERPOOL command.

gbpname
The name of the group buffer pool.

retcode
The return code from IXCQUERY.

reason
The reason code from IXCQUERY.

To determine the reason, see IXCQUERY Return and Reason Codes .

The remaining output for each group buffer pool consists of one or more of the following sections:

- DSNB755I and DSNB756I: Group buffer pool status
- DSNB757I: CFRM policy status
- DSNB758I and DSNB759I: Allocation details for the group buffer pool
- DSNB798I: Last checkpoint
- DSNB799I: Secondary group buffer pool attributes
- DSNB766I, DSNB767I, and DSNB769I: Connection list
- DSNB771I: Incremental member detail statistics
- DSNB772I: Cumulative member detail statistics
- DSNB773I and DSNB774I: Synchronous read statistics
- DSNB775I and DSNB789I: Prefetch read statistics
- DSNB776I: Synchronous write statistics
- DSNB777I: Asynchronous write statistics
- DSNB778I and DSNB796I: Castout statistics
- DSNB797I: Other interactions
- DSNB764I and DSNB793I: Secondary group buffer pool statistics
- DSNB782I: Incremental group statistics
- DSNB783I: Cumulative group statistics
- DSNB784I and DSNB785I: Group read statistics
- DSNB786I: Group write statistics
- DSNB787I: Group reclaims and castouts
- DSNB788I: Cross-invalidation statistics
- DSNB762I: Secondary group buffer pool details
- DSNB815I and DSNB816I: P-lock status
-

If Db2 cannot display certain information, one or more of the following messages are included in the output:

- DSNB752I: Group detail statistics are not available because a rebuild is in progress
- DSNB763I: The group buffer pool is not defined with GBPCACHE(NO)
- DSNB765I: No connection list
- DSNB768I: No group buffer pools are defined with GBPCACHE(NO)
- DSNB770I: Member detail statistics are not available
- DSNB780I: Group detail statistics are not available because the member is not connected
- DSNB781I: Group detail statistics are not available because the MVS IXLCACHE request failed
- DSNB791I: The member is not connected
- DSNB792I: No members are connected
- DSNB794I: The member is not connected to any group buffer pool
- DSNB795I: No members are connected to any group buffer pool

The DISPLAY GROUPBUFFERPOOL output ends with one of the following messages:

- DSNB790I: End of output
- DSNB499I: Display terminated because of insufficient space

DSNB755I and DSNB756I: Group buffer pool status

Message DSNB750I or DSNB751I is followed by a description of the status of the group buffer pool.

```
DSNB755I - DB2 GROUP BUFFER POOL
STATUS                CONNECTED = status1
              CURRENT DIRECTORY TO DATA RATIO =
ratio1
              PENDING DIRECTORY TO DATA RATIO =
ratio2
              CURRENT GBPCACHE ATTRIBUTE =
gcache1
              PENDING GBPCACHE ATTRIBUTE =
gcache2
DSNB756I - CLASS CASTOUT THRESHOLD = class-
threshold1,class-threshold2
           GROUP BUFFER POOL CASTOUT THRESHOLD
= gbp-threshold %
```

```
           GROUP BUFFER POOL CHECKPOINT
INTERVAL = interval MINUTES
           RECOVERY STATUS = status1
           AUTOMATIC RECOVERY = auto-recovery
```

status1
An indication of whether the Db2subsystem on which the DISPLAY GROUPBUFFERPOOL command was issued is connected to the group buffer pool.

YES
The Db2 subsystem is actively connected to the group buffer pool.

NO
The Db2 subsystem is not actively connected to the group buffer pool.

ratio1
The ratio of the number of directory entries to the number of data pages, as specified for the current allocation of the group buffer pool.

ratio2
The requested ratio of directory entries to data pages to take effect at the next reallocation of the group buffer pool.

gcache1
The value of the GBPCACHE attribute for the current allocation of the group buffer pool.

gcache2
The value of the GBPCACHE attribute to take effect at the next reallocation of the group buffer pool.

class-threshold1
The threshold at which class castouts are to be initiated. This value is expressed as a percentage of the group buffer pool size.

class-threshold2
The threshold at which class castouts are to be initiated. This value is expressed as an absolute number of buffers. *class-threshold2* is used to determine the threshold only if *class-threshold1* is zero and *class-threshold2* is nonzero. Otherwise, *class-threshold1* is used to determine the threshold.

gbp-threshold
The threshold at which castouts are to be initiated at the group buffer pool level. This value is expressed as a percentage of the group buffer pool size.

interval
The time, in minutes, between successive group buffer pool checkpoints.

status1
The recovery status for the group buffer pool. Possible values are:

DAP
Damage assessment is pending. Db2 is assessing damage to the group buffer pool in response to a coupling facility structure failure. The group buffer pool is temporarily stopped by Db2 and is unavailable for use until Db2 completes the damage assessment.

NORMAL
No pending recovery action exists for this group buffer pool.

auto-recovery
The value of the AUTOREC attribute for the group buffer pool. Possible values are:

YES
If the group buffer pool fails, Db2 is to automatically initiate recovery for the objects that use this group buffer pool. YES is the default.

NO
Db2 is not to initiate automatic group buffer pool recovery. If the group buffer pool fails, issue Db2 START DATABASE commands to recover the objects.

Related information:

-ALTER GROUPBUFFERPOOL (Db2) (Db2 Commands)
-START DATABASE (Db2) (Db2 Commands)
How Db2 writes from the group buffer pool to disk (Db2 Data Sharing Planning and Administration)
Group buffer pool thresholds (Db2 Data Sharing Planning and Administration)

DSNB757I: CFRM policy status

If Db2retrieved z/OS CFRM policy information for the group buffer pool, the DISPLAY GROUPBUFFERPOOL command output includes information about the structure that is associated with the group buffer pool.

```
DSNB757I - MVS CFRM POLICY STATUS FOR structure-
name = status2
             MAX SIZE INDICATED IN POLICY =
psize KB
             DUPLEX INDICATOR IN POLICY =
dupstat
             CURRENT DUPLEXING MODE = dupmode
             ALLOCATED = status1
```

structure-name
The coupling facility structure name for this group buffer pool, such as DSNCAT_GBP0.

status2
The z/OS global status of the coupling facility structure. Possible values are:

NORMAL
The structure is defined in the current CFRM policy and has no current z/OS restrictions.

CHNGP
A change is pending in the structure policy.

psize
The size (in KBs) of the coupling facility structure, as indicated in the CFRM policy definition.

dupstat
The duplexing attribute for the coupling facility structure, as indicated by the DUPLEX parameter in the CFRM policy definition. Possible values are DISABLED, ENABLED, or ALLOWED.

dupmode
The current duplex mode of the group buffer pool. Possible values are:

SIMPLEX
The group buffer pool is in simplex mode.

DUPLEX
The group buffer pool is in duplex mode.

INTRAN
The group buffer pool is in a transition state, either from simplex mode to duplex mode, or from duplex mode to simplex mode. The rebuild status indicator in message DSNB758I gives information about the transition state.

status1
An indication of whether the backing coupling facility structure is allocated:

YES
The coupling facility structure is allocated in a coupling facility.

NO
The coupling facility structure is not allocated in any coupling facility.

Related information:

Coupling facility structures (Db2 Installation and Migration)
Defining coupling facility structures (Db2 Installation and Migration)
CFRM parameters for administrative data utility (z/OS MVS Setting Up a Sysplex)

DSNB758I and DSNB759I: Allocation details for the group buffer pool

If Db2 successfully queries the MVS CFRM policy and determines that the group buffer pool is allocated, the DISPLAY GROUPBUFFERPOOL command output includes allocation details.

```
DSNB758I -     ALLOCATED SIZE = asize KB
               VOLATILITY STATUS = volstat
               REBUILD STATUS = rbldstat
               CFNAME = cfname
               CFLEVEL - OPERATIONAL = cflevel1
               CFLEVEL - ACTUAL = cflevel2
DSNB759I -     NUMBER OF DIRECTORY ENTRIES =
dir#
               NUMBER OF DATA PAGES = data#
               NUMBER OF CONNECTIONS = conn#
```

asize
The size (in KBs) of the allocated group buffer pool structure.

volstat
The volatility status of the backing group buffer pool structure for this group buffer pool. Possible values are:

VOLATILE
The backing coupling facility structure is volatile.

NON-VOLATILE
The backing coupling facility structure is non-volatile.

rbldstat
An indication of whether the group buffer pool structure is being rebuilt, and, if so, which part of the rebuild process is in progress. Possible values are:

NONE
The structure is not being rebuilt.

QUIESCE
The structure is being rebuilt and is currently in the rebuild quiesce phase.

CONNECT
The structure is being rebuilt and is currently in the rebuild connect phase.

CLEANUP
The rebuild process is complete, and the connected Db2 members are making final preparations to use the new group buffer pool structure.

If *rbldstat* is CLEANUP and the duplexing status in message DSNB757I is INTRAN, the group buffer pool is in the final stages of making the transition from duplex mode back to simplex mode. The Db2 group is switching to the secondary group buffer pool.

STOPPING
The rebuild process is stopped, and the connected Db2 members are making preparations to fall back to the original group buffer pool structure. If *rbldstat* is STOPPING and the duplexing status in message DSNB757I is INTRAN, the group buffer pool is making the transition from duplex mode back to simplex mode and reverting to the primary group buffer pool.

DUPLEXED
The group buffer pool is in steady-state duplexing mode.

SWITCHING
The group buffer pool is in the initial phase of making the transition from duplex mode back to simplex mode and switching to the secondary group buffer pool.

cfname
The name of the coupling facility in which the group buffer pool is allocated. If the group buffer pool is duplexed, *cfname* is the name of the coupling facility that is associated with the primary group buffer pool.

cflevel1
The coupling facility level from a Db2 functionality perspective for the coupling facility in which this group buffer pool is allocated. If the group buffer pool is duplexed, *cflevel1* is the coupling facility level that is associated with the primary group buffer pool.

cflevel2
The coupling facility level for the coupling facility in which this group buffer pool is allocated. If the group buffer pool is duplexed, *cflevel2* is the coupling facility level that is associated with the primary group buffer pool.

dir#
The number of directory entries that are allocated for the coupling facility structure.

data#
The number of data pages that are allocated for the coupling facility structure.

conn#
The number of Db2 subsystems that are connected to the coupling facility structure. This number includes both active connections and failed-persistent connections. If the DISPLAY GROUPBUFFERPOOL command includes the CONNLIST option, the details of the connection status are listed in message DSNB767I.

Related information:

Coupling facility structures (Db2 Installation and Migration)
Planning for coupling facility availability for data sharing
Rebuild events (Db2 Installation and Migration)
How Db2 recovers from coupling facility failures (Db2 Data Sharing Planning and Administration)

DSNB798I: Last checkpoint

If Db2 determines, by successfully querying the MVS CFRM policy, that the group buffer pool is allocated, the DISPLAY GROUPBUFFERPOOL command output includes checkpoint information

```
DSNB798I - LAST GROUP BUFFER POOL CHECKPOINT

timestamp
            GBP CHECKPOINT RECOVERY
LRSN             = lrsn
            STRUCTURE
OWNER                          = member-name
```

timestamp
The date and time of the last group buffer pool checkpoint.

lrsn
The log record sequence number (LRSN) that was recorded by the last group buffer pool checkpoint.

member-name
The name of the member that is the structure owner for the group buffer pool.

A value of UNKNOWN means that Db2 is not able to determine which member is the structure owner for the group buffer pool. This condition occurs only in error situations. See the message that is associated with that error.

The structure owner has the following responsibilities:

- Issue group buffer pool checkpoints.
- Detect the group buffer pool castout threshold (the GBPOOLT value) and initiate castout if this threshold is reached. (The structure owner initiates castout by notifying the page set or partition castout owners.)
- Coordinate the damage assessment process if the group buffer pool fails.
- Coordinate the rebuild process for the group buffer pool.

DSNB799I: Secondary group buffer pool attributes

If the group buffer pool is duplexed and Db2 successfully queried the MVS CFRM administrative policy, the DISPLAY GROUPBUFFERPOOL command output includes the attributes of the secondary group buffer pool. This message is not displayed if the group buffer pool is in a transition state between simplexing and duplexing.

```
DSNB799I - SECONDARY GBP ATTRIBUTES
            ALLOCATED
SIZE                            = ssize KB
            VOLATILITY
STATUS                         = svolstat

CFNAME                                    =
cfname
            CFLEVEL -
OPERATIONAL                     = cflevel1
            CFLEVEL -
ACTUAL                          = cflevel2
            NUMBER OF DIRECTORY
ENTRIES                 = sdir#
```

```
              NUMBER OF DATA
PAGES                       =  sdata#
```

ssize
The allocated size (in KBs) of the coupling facility structure for the secondary group buffer pool.

svolstat
The volatility status of the secondary group buffer pool. Possible values are:

VOLATILE
The structure is volatile.

NON-VOLATILE
The structure is non-volatile.

cfname
The name of the coupling facility in which the group buffer pool is allocated. If the group buffer pool is duplexed, this value is the coupling facility name that is associated with the primary group buffer pool.

cflevel1
The coupling facility level from a Db2 functionality perspective for the coupling facility in which the secondary group buffer pool is allocated.

cflevel2
The coupling facility level for the coupling facility in which the secondary group buffer pool is allocated.

sdir#
The number of directory entries that are allocated for the secondary group buffer pool.

sdata#
The number of data pages that are allocated for the secondary group buffer pool.

DSNB766I, DSNB767I, and DSNB769I: Connection list

If the DISPLAY GROUPBUFFERPOOL command included the CONNLIST option, the output includes a list of connections for the group buffer pool. One DSNB767I message is issued for each defined connection to the group buffer pool.

```
DSNB766I -  THE CONNLIST REPORT FOLLOWS
DSNB767I - CONNECTION NAME = conname        ,
CONNECTION STATUS = status
                CONNECTOR'S
RELEASE                     =     connector-
release
DSNB769I - THE CONNLIST REPORT IS COMPLETE
```

conname
The name of the connection. Db2 subsystems use the Db2 member name as the connection name.

status
The status of the connection. Possible values are:

A
Active.

F
Failed-persistent.

D
Dually connected to both the original structure and the new structure while the group buffer pool structure is being rebuilt.

connector-release
This value is always 10100.

Related information:

Protection of retained locks: failed-persistent connections (Db2 Data Sharing Planning and Administration)

DSNB771I: Incremental member detail statistics

If the DISPLAY GROUPBUFFERPOOL command included the MDETAIL(INTERVAL) option, the output includes incremental statistics for the member.

```
DSNB771I - INCREMENTAL MEMBER DETAIL STATISTICS
SINCE basetime
```

basetime
The start time of the interval for which the statistics were accumulated. This value is the time of the previous DISPLAY GROUPBUFFERPOOL MDETAIL(INTERVAL) report for this Db2 member. If such a report does not exist, this value is the time that the member first connected to the group buffer pool.

DSNB772I: Cumulative member detail statistics

If the DISPLAY GROUPBUFFERPOOL command included the MDETAIL(*) option, the output includes cumulative statistics for the member.

```
DSNB772I - CUMULATIVE MEMBER DETAIL STATISTICS
SINCE basetime
```

basetime
The start time of the interval for which the statistics were accumulated. This value is the time that this Db2 member first connected to the group buffer pool.

DSNB773I and DSNB774I: Synchronous read statistics

If the DISPLAY GROUPBUFFERPOOL command included the MDETAIL option, the output includes synchronous read statistics for the group buffer pool. The term *synchronous* means that the coupling facility interaction is done under the execution unit of the Db2 user.

```
DSNB773I - MEMBER DETAIL STATISTICS
             SYNCHRONOUS READS
               DUE TO BUFFER INVALIDATION
```

```
                  DATA
RETURNED                            = r1
                  DATA NOT
RETURNED                         = r2
DSNB774I -      DUE TO DATA PAGE NOT IN BUFFER
POOL
                  DATA
RETURNED                            = r3
                  DATA NOT
RETURNED                         = r4
```

The following values in message DSNB773I refer to synchronous coupling facility read requests that are issued because the virtual buffer was marked invalid.

r1
The number of times that data is successfully returned from the group buffer pool in response to the request.

r2
The number of times that data is not returned from the group buffer pool in response to the request.

The values in message DSNB774I refer to synchronous coupling facility read requests that are issued because the required data was not in the buffer pool buffer.

r3
The number of times that data is successfully returned from the group buffer pool in response to the request.

r4
The number of times that data is not returned from the group buffer pool in response to the request.

DSNB775I and DSNB789I: Prefetch read statistics

If the DISPLAY GROUPBUFFERPOOL command included the MDETAIL option, the output includes prefetch read statistics.

```
DSNB775I -   PREFETCH READS
               DATA NOT
RETURNED                           = r5
DSNB789I -    REGISTER PAGE
LIST                         = r7
               PAGES
RETRIEVED                           = r8
```

r5
The number of pages that were retrieved from DASD, instead of the group buffer pool, in response to the register page list (RPL) request.

The RPL feedback indicated that the page was not cached in the group buffer pool. Therefore, to avoid a coupling facility read request for the page, Db2 retrieved the page directly from DASD. No coupling facility interactions are associated with this *r5* value.

r7
The number of coupling facility requests to register interest in a list of pages. Db2 makes this request when sequential or list prefetch is used and the following conditions are met:

- The Db2 member is running on a particular service level of MVS 5.2 or later.
- The group buffer pool is allocated in a coupling facility with CFLEVEL=2 or higher.

r8
The number of coupling facility requests to prefetch a page in the group buffer pool as a result of feedback from the request to register a list of pages.

DSNB776I: Synchronous write statistics

If the DISPLAY GROUPBUFFERPOOL command included the MDETAIL option, the output includes synchronous write statistics for the group buffer pool. The term *synchronous* means that the coupling facility interaction is done under the execution unit of the Db2 user.

```
DSNB776I -   SYNCHRONOUS WRITES
               CHANGED
PAGES                              = w1
               CLEAN
PAGES                                = w2
```

w1
The number of changed pages that were written synchronously to the coupling facility.

w2
The number of clean pages that were written synchronously to the coupling facility.

DSNB777I: Asynchronous write statistics

If the DISPLAY GROUPBUFFERPOOL command included the MDETAIL option, the output includes asynchronous write and cross-invalidation statistics for the group buffer pool. The term *asynchronous* means that the coupling facility interaction is done under the execution unit of a Db2 system, such as with a prefetch operation.

```
DSNB777I -   ASYNCHRONOUS WRITES
               CHANGED
PAGES                                = changed-pages-
count
               CLEAN
PAGES                                  = clean-pages-
count
             FAILED WRITES DUE TO LACK OF
STORAGE      = failed-writes-count
             WRITE-AROUND
PAGES                          = write-around-
count
```

changed-pages-count
The number of changed pages that were written asynchronously to the coupling facility.

clean-pages-count
The number of clean pages that were written asynchronously to the coupling facility.

failed-writes-count
The number of coupling facility write requests that were not completed because the group buffer pool did not have enough storage.

write-around-count
The number of changed pages that are written to disk through group-buffer-pool write-around protocol.

Related information:

Relief from storage shortages in group buffer pools (Db2 for z/OS What's New?)

DSNB778I and DSNB796I: Castout statistics

If the DISPLAY GROUPBUFFERPOOL command included the MDETAIL option, the output includes group buffer pool statistics for castouts, checkpoints, and rebuild operations.

```
DSNB778I - CASTOUT THRESHOLDS DETECTED
             FOR
CLASSES                                  = t1
             FOR GROUP BUFFER
POOL                        = t2
           GBP CHECKPOINTS
TRIGGERED                     = k1
           PARTICIPATION IN
REBUILD                     = k2
DSNB796I - CASTOUTS
             PAGES
CASTOUT                                = c1
             UNLOCK
CASTOUT                               = c2
             READ CASTOUT
CLASS                         = c3
             READ CASTOUT
STATISTICS                    = c4
             READ DIRECTORY
INFO                          = c5
```

t1
The number of times that the class castout threshold was detected.

t2
The number of times that the group buffer pool castout threshold was detected.

k1
The number of group buffer pool checkpoints that were triggered.

k2
The number of times that this member participated in a rebuild of the group buffer pool structure.

c1
That number of pages that were cast out.

c2
The number of requests to unlock a page for castout.

c3
The number of requests to determine which pages, from a particular page set or partition, must be cast out because they are cached as changed pages. This request is issued either by the page set or partition castout owner, or, when the group buffer pool castout threshold is reached by the group buffer pool structure owner.

c4
The number of coupling facility requests to cast out statistics.

c5
The number of requests to read directory information. These requests are made during group buffer pool checkpoints.

Related information:

Group buffer pool thresholds (Db2 Data Sharing Planning and Administration)
Group buffer pool checkpoint (Db2 Data Sharing Planning and Administration)
How Db2 recovers from coupling facility failures (Db2 Data Sharing Planning and Administration)
How Db2 writes from the group buffer pool to disk (Db2 Data Sharing Planning and Administration)
How Db2 gathers checkpoint information (Db2 Data Sharing Planning and Administration)

DSNB797I: Other interactions

If the DISPLAY GROUPBUFFERPOOL command included the MDETAIL option, the output includes local statistics on various operations.

```
DSNB797I - OTHER INTERACTIONS
             REGISTER
PAGE                              = o1
             UNREGISTER
PAGE                            = o2
             DELETE
NAME                               = o3
             READ STORAGE
STATISTICS                    = o4
             EXPLICIT CROSS
INVALIDATIONS               = o5
             ASYNCHRONOUS GBP
REQUESTS                   = o6
```

o1
The number of requests to the coupling facility to register interest in a single page.

o2
The number of requests to the coupling facility to remove the registered interest in a single page.

o3
The number of requests to the coupling facility to delete the directory entries that are associated with a set of pages.

o4
The number of requests to the coupling facility to read the statistics counters that are associated with the structure. Db2 generally issues this request once per group buffer pool checkpoint and once per DISPLAY GROUPBUFFERPOOL command with the GDETAIL option.

o5
The number of explicit cross-invalidations for pages in the group buffer pool.

o6
The number of coupling facility requests to the primary group buffer pool that were converted from synchronous to asynchronous.

DSNB764I and DSNB793I: Secondary group buffer pool statistics

If the DISPLAY GROUPBUFFERPOOL command included the MDETAIL option and the group buffer pool is duplexed, the output includes statistics on requests and writes to the secondary group buffer pool.

```
DSNB764I - DUPLEXING STATISTICS FOR secondary-
gbpname
             WRITES
               FAILED DUE TO LACK OF
STORAGE           = s2
               ASYNC COMPLETION
CHECKS                 = s3
DSNB793I -   DELETE NAME
LIST                        = s5
             READ CASTOUT
STATISTICS                = s6
             DELETE
NAME                             = s7
             OTHER ASYNCHRONOUS GBP
REQUESTS           = s8
```

secondary-gbpname
The secondary group buffer pool name. This name is the primary group buffer pool name (such as GBP0) suffixed with -SEC.

s2
The number of times that a write request from the coupling facility did not complete because the secondary group buffer pool did not have enough storage.

s3
The number of times that Db2 checked whether a changed page was written to the secondary group buffer pool, but the write operation was not yet complete. Thus, the transaction had to wait until the write to the secondary group buffer pool completed.

s5
The number of requests to delete from the secondary group buffer pool a set of pages that were recently cast out from the primary group buffer pool. If the group buffer pool was duplexed for the entire reporting interval, this number should be roughly equal to the number of **UNLOCK CASTOUT** requests, as reported in message DSNB796I.

s6
The number of requests to check for orphaned data entries in the secondary group buffer pool. *Orphaned data entries* are changed data entries in the secondary group buffer pool without a corresponding changed data entry in the primary group buffer pool.

The group buffer pool structure owner periodically issues these requests to determine whether orphaned data entries in the secondary group buffer pool need to be cleaned up. Orphaned data entries are expected periodically and do not indicate a data inconsistency problem. Orphaned data entries can be introduced by certain transaction or system failures or by the unlikely circumstance that new group buffer pool write activity occurred concurrently with castout processing.

s7
The number of requests to delete orphaned data entries from the secondary group buffer pool. The group buffer pool structure owner issues these requests if it determines that orphaned data entries need to be cleaned up.

s8
The number of asynchronous coupling facility requests that were sent to the secondary group buffer pool. This number excludes the *s3* value.

Related information:

Characteristics of primary and secondary structures (Db2 Installation and Migration)
How Db2 writes from the group buffer pool to disk (Db2 Data Sharing Planning and Administration)

DSNB782I: Incremental group statistics

If the DISPLAY GROUPBUFFERPOOL command included the GDETAIL(INTERVAL) option, the output includes incremental statistics for the group buffer pool.

```
DSNB782I - INCREMENTAL GROUP DETAIL STATISTICS
SINCE basetime
```

basetime
The start time of the interval for which the statistics were accumulated. This value is the time

of the previous DISPLAY GROUPBUFFERPOOL GDETAIL(INTERVAL) report from this Db2 member. If such a report does not exist, this value is the time that the group buffer pool was allocated or reallocated.

DSNB783I: Cumulative group statistics

If the DISPLAY GROUPBUFFERPOOL command included the GDETAIL(*) option, the output includes cumulative statistics for the group buffer pool.

```
DSNB783I - CUMULATIVE GROUP DETAIL STATISTICS
SINCE basetime
```

basetime
The start time of the interval for which the statistics were accumulated. This value is the time that the group buffer pool was first allocated or reallocated.

DSNB784I and DSNB785I: Group read statistics

If the DISPLAY GROUPBUFFERPOOL command included the GDETAIL option, the output includes read statistics for the group buffer pool.

```
DSNB784I - GROUP DETAIL STATISTICS
             READS
               DATA
RETURNED                          = r1
DSNB785I -     DATA NOT RETURNED
                 DIRECTORY ENTRY
EXISTED               = r2
                 DIRECTORY ENTRY
CREATED               = r3
                 DIRECTORY ENTRY NOT
CREATED           = r4, r5
```

r1
The "read hit" counter. The number of times that a page was returned for a coupling facility read request.

r2
The "read miss directory hit" counter. The number of times that a coupling facility read request specified a page for which a directory entry exists, but no data was cached for that page. Data was not returned for the coupling facility read request.

r3
The "read miss name assigned" counter. The number of times that a coupling facility read request specified a page for which a directory entry was created. Data was not returned for the coupling facility read request.

r4
The "read miss assignment suppressed" counter. The number of times that a coupling facility read request specified a page for which no directory entry exists and no directory entry was created. Data was not returned for the coupling facility read request.

r5
The "read miss cache full" counter. The number of times that both of the following events occurred:

- A coupling facility read request specified a page for which no directory entry exists.
- A directory entry was not created because the group buffer pool did not have enough storage.

Data was not returned for the coupling facility read request.

DSNB786I: Group write statistics

If the DISPLAY GROUPBUFFERPOOL command included the GDETAIL option, the output includes write statistics for the group buffer pool.

```
DSNB786I -   WRITES
               CHANGED
PAGES                             = w1
               CLEAN
PAGES                               = w2
               FAILED DUE TO LACK OF
STORAGE              = w3
             CHANGED PAGES SNAPSHOT
VALUE                 = p1
```

w1
The "changed page write hit" counter. The number of changed pages that were successfully written.

w2
The "clean page write hit" counter. The number of clean pages that were successfully written.

w3
The "write miss cache full" counter. The number of times that a coupling facility write request was not completed because the group buffer pool did not have enough storage.

p1
The "total changed" counter. The current number of changed pages. The number is captured at a single point in time. This value is not affected by whether the DISPLAY GROUPBUFFERPOOL output is incremental or cumulative.

DSNB787I: Group reclaims and castouts

If the DISPLAY GROUPBUFFERPOOL command included the GDETAIL option, the output includes statistics on reclaims and castouts for the group buffer pool.

```
DSNB787I -   RECLAIMS
               FOR DIRECTORY
ENTRIES                    = d1
               FOR DATA
ENTRIES                          = d2

CASTOUTS                                  = c1
```

d1
The "directory entry reclaim" counter. The number of times that a name assignment required that a directory entry be reclaimed by the coupling facility.

d2
The "data entry reclaim" counter. The number of times that a name assignment required that a data page be reclaimed by the coupling facility.

c1
The "castout" counter. The number of pages that were cast out of the group buffer pool.

DSNB788I: Cross-invalidation statistics

If the DISPLAY GROUPBUFFERPOOL command included the GDETAIL option, the output includes cross-invalidation (XI) statistics for the group buffer pool.

```
DSNB788I -   CROSS INVALIDATIONS
               DUE TO DIRECTORY
RECLAIMS                = x1
               DUE TO
WRITES                            = x2

EXPLICIT                                  = x3
```

x1
The "XI for directory reclaim" counter. The number of times that a directory entry with registered Db2 interest was reclaimed. Therefore, cross-invalidation occurred.

x2
The "XI for write" counter. The number of times that a coupling facility write request caused cross-invalidation to occur for one or more registered Db2 members.

x3
The "XI for explicit invalidation" counter. The number of times that cross-invalidation occurred for one or more registered Db2 members, because it was explicitly requested by the coupling facility.

Related information:

Group buffer pool size is too small (Db2 Data Sharing Planning and Administration)
How Db2 writes to the group buffer pool (Db2 Data Sharing Planning and Administration)
Too few directory entries (Db2 Data Sharing Planning and Administration)

DSNB762I: Secondary group buffer pool details

If the DISPLAY GROUPBUFFERPOOL command included the GDETAIL option, and the group buffer pool is duplexed, the output includes the following information about the secondary group buffer pool:

- Statistics on writes to the secondary group buffer pool
- The total number of changed pages for the secondary group buffer pool.

```
DSNB762I - DUPLEXING STATISTICS FOR secondary-
gbpname
              WRITES
                CHANGED PAGES = changed-pages
                FAILED DUE TO LACK OF STORAGE =
writes-full
                CHANGED PAGES SNAPSHOT
VALUE       = changed-pages-snapshot
```

secondary-gbpname
The secondary group buffer pool name. This name is the primary group buffer pool name (such as GBP0) suffixed with -SEC.

changed-pages
The number of times that a coupling facility write request for a changed page completed successfully.

If the group buffer pool was duplexed for the entire reporting interval, this number should be roughly equal to the "changed page write hit" counter in message DSNB786I. However, these counts might not be the same because of timing windows in gathering these values or if previous transaction failures occurred.

writes-full
The number of times that a write request from the coupling facility was not completed because of a lack of storage in the secondary group buffer pool.

changed-pages-snapshot
The total changed counter and snapshot value of the current number of changed pages in the secondary group buffer pool. This value is not affected by whether the DISPLAY GROUPBUFFERPOOL output is incremental or cumulative.

If the group buffer pool is duplexed, this number should be roughly equal to the "total changed"counter in message DSNB786I. However, these counts might not be the same because of timing windows in gathering these values or if previous transaction failures occurred.

Related information:

Duplexed structures (Db2 Installation and Migration)
How updates are made in a data sharing environment (Introduction to Db2 for z/OS)

DSNB815I and DSNB816I: P-lock status

The DISPLAY GROUPBUFFERPOOL command output includes the physical lock (P-lock) status for the group buffer pool. This P-lock information can be useful

when you are monitoring and tuning database performance, especially in a data sharing environment.

```
DSNB815I - PAGE P-LOCK LOCK/UNLOCK,
             REQUESTS FOR SPACE
MAP                          = nn
             REQUESTS FOR DATA
PAGES                         = nn
             REQUESTS FOR INDEX
LEAF                         = nn
             UNLOCK
REQUESTS                                  = nn
DSNB816I - PAGE P-LOCK SUSPENSIONS/
NEGOTIATIONS,
             SUSPENSIONS FOR SPACE
MAP                           = nn
             P-LOCK SUSPENSIONS FOR
DATA                         = nn
             P-LOCK SUSPENSIONS FOR INDEX
LEAF                 = nn
             NEGOTIATIONS FOR SPACE
MAP                          = nn
             P-LOCK NEGOTIATIONS FOR DATA
PAGES                = nn
             NEGITIATIONS FOR INDEX LEAF
PAGES                 = nn
```

DSNB752I: Group detail statistics are not available because a rebuild is in progress

```
DSNB752I - GROUP DETAIL STATISTICS ARE NOT
AVAILABLE FOR THE GROUP BUFFER POOL
BECAUSE A REBUILD IS IN PROGRESS
```

The DISPLAY GROUPBUFFERPOOL command included the GDETAIL option. However, Db2cannot retrieve group statistics because the group buffer pool is being rebuilt.

DSNB763I: The group buffer pool is not defined with GBPCACHE(NO)

```
DSNB763I - gbpname IS NOT DEFINED WITH GBPCACHE
NO
```

The DISPLAY GROUPBUFFERPOOL command included the TYPE(NOCACHE) option and either one name or a list of names in the selection list. However, the indicated group buffer pool is not defined with the GBPCACHE(NO) attribute, and therefore does not meet the qualification to be included in the output.

gbpname
The group buffer pool name.

The display is terminated for this group buffer pool. If the command has other group buffer pool names to process, command processing continues.

This message is issued once for each group buffer pool that does not match the criterion to be defined with GBPCACHE(NO).

DSNB765I: No connection list

```
DSNB765I - NO CONNLIST REPORT IS GENERATED.
THERE ARE NO CONNECTIONS TO THIS GROUP BUFFER
POOL.
```

The DISPLAY GROUPBUFFERPOOL command included the CONNLIST option. However, no connections currently exist to report for the group buffer pool.

DSNB768I: No group buffer pools are defined with GBPCACHE(NO)

```
DSNB768I - THERE ARE NO GROUP BUFFER POOLS
DEFINED WITH GBPCACHE NO
```

The DISPLAY GROUPBUFFERPOOL command included the TYPE(NOCACHE) option and an asterisk (*) as the selection list. However, no group buffer pools are defined with the GBPCACHE(NO) attribute.

Command processing is terminated.

DSNB770I: Member detail statistics are not available

```
DSNB770I - MEMBER DETAIL STATISTICS ARE NOT
AVAILABLE FOR THE GROUP BUFFER POOL.
             THIS DB2 HAS NEVER BEEN CONNECTED
TO THE GROUP BUFFER POOL.
```

The DISPLAY GROUPBUFFERPOOL command included the MDETAIL option. However, member statistics are not available for the requested group buffer pool because this member has not connected to the group buffer pool since it was started.

DSNB780I: Group detail statistics are not available because the member is not connected

```
DSNB780I - GROUP DETAIL STATISTICS ARE NOT
AVAILABLE FOR THE GROUP BUFFER POOL.
             THIS DB2 IS NOT CURRENTLY
CONNECTED TO THE GROUP BUFFER POOL.
```

The DISPLAY GROUPBUFFERPOOL command included the GDETAIL option. However, Db2 could not retrieve group statistics because this Db2 member is not currently connected to the group buffer pool.

DSNB781I: Group detail statistics are not available because the MVS IXLCACHE request failed

```
DSNB781I - GROUP DETAIL STATISTICS ARE NOT
AVAILABLE FOR THE GROUP BUFFER POOL.
             MVS IXLCACHE RETURN CODE = retcode
MVS IXLCACHE REASON CODE = reason
```

The DISPLAY GROUPBUFFERPOOL command included the GDETAIL option. However, Db2 could not retrieve group statistics because the statistics request

(through the z/OS MVS IXLCACHE macro) did not successfully complete.

retcode
The return code from MVS for the statistics request.

reason
The reason code from MVS for the statistics request.

Related information:

IXLCACHE — Cache Services
Return and Reason Codes for IXLCACHE REQUEST=READ_STGSTATS

DSNB791I: The member is not connected

```
DSNB791I - THIS DB2 IS NOT CONNECTED TO gbpname
```

The DISPLAY GROUPBUFFERPOOL command included the TYPE(MCONN) option and either one name or a list of names in the selection list. However, the Db2 member on which the DISPLAY GROUPBUFFERPOOL command was issued is not currently connected to the specified group buffer pool.

gbpname
The group buffer pool name.

The display is terminated for this group buffer pool. If the command includes other group buffer pool names to process, command processing continues.

DSNB792I: No members are connected

```
DSNB792I - NO DB2 IN THE GROUP IS CONNECTED TO
gbpname
```

The DISPLAY GROUPBUFFERPOOL command included the TYPE(GCONN) option and either one name or a list of names in the selection list. However, no Db2 member in the group is connected to the specified group buffer pool.

gbpname
The group buffer pool name.

The display is terminated for this group buffer pool. If the command includes other group buffer pool names to process, command processing continues.

DSNB794I: The member is not connected to any group buffer pool

```
DSNB794I - THIS DB2 IS NOT CONNECTED TO ANY
GROUP BUFFER POOL
```

The DISPLAY GROUPBUFFERPOOL command included the TYPE(MCONN) option and an asterisk (*) as the selection list. However, the Db2 member on which the DISPLAY GROUPBUFFERPOOL command was issued is not connected to any group buffer pools.

Command processing is terminated.

DSNB795I: No members are connected to any group buffer pool

```
DSNB795I - NO DB2 IN THE GROUP IS CONNECTED TO
ANY GROUP BUFFER POOL
```

The DISPLAY GROUPBUFFERPOOL command included the TYPE(GCONN) option and an asterisk (*) as the selection list. However, no group buffer pools are connected to any Db2 members in the data sharing group.

Command processing is terminated.

DSNB790I: End of output

The following message indicates the end of the output from the DISPLAY GROUPBUFFERPOOL command.

```
DSNB790I - DISPLAY FOR GROUP BUFFER POOL
gbpname IS COMPLETE
```

gbpname
The group buffer pool name.

DSNB499I: Display terminated because of insufficient space

If the DISPLAY GROUPBUFFERPOOL output is too long, the output ends with message DSNB499I. This message indicates that the command was unable to obtain storage for more messages. This situation occurs only for a long display request, such as a detail display for many group buffer pools.

```
DSNB499I - DISPLAY TERMINATED DUE TO
INSUFFICIENT MESSAGE SPACE
```

The output is truncated.

To see all of the output, reissue the DISPLAY GROUPBUFFERPOOL command, and specify a smaller number of group buffer pools.

System action

Processing continues.

User response

No action is required.

DSNB751I MVS CFRM POLICY INFORMATION NOT AVAILABLE FOR GROUP BUFFER POOL *gbpname* MVS IXCQUERY RETURN CODE = *retcode* MVS IXCQUERY REASON

CODE = *reason* A PARTIAL DISPLAY FOLLOWS

Explanation

This message is a section of output from the DISPLAY GROUPBUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB752I **GROUP DETAIL STATISTICS ARE NOT AVAILABLE FOR THE GROUP BUFFER POOL BECAUSE A REBUILD IS IN PROGRESS**

Explanation

This message is a section of output from the DISPLAY GROUPBUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB753I **GROUP BUFFER POOL STRUCTURE OWNER INFORMATION NOT AVAILABLE IRLM NOTIFY RETURN CODE = *retcode* IRLM NOTIFY REASON CODE = *reason***

Explanation

Db2 could not retrieve group buffer pool structure owner information for message DSNB798I because the IRLM Notify request did not successfully complete. A preceding DSNB750I or DSNB751I message identifies the associated group buffer pool.

retcode
Return code from IRLM on the Notify request

reason
Reason code from IRLM on the Notify request

System action

Processing continues.

Related concepts
IRLM return and reason codes (IRLM)
Related information
DSNB750I
DISPLAY FOR GROUP BUFFER POOL *gbpname* FOLLOWS

DSNB751I
MVS CFRM POLICY INFORMATION NOT AVAILABLE FOR GROUP BUFFER POOL *gbpname* MVS IXCQUERY RETURN CODE = *retcode* MVS IXCQUERY REASON CODE = *reason* A PARTIAL DISPLAY FOLLOWS

DSNB755I **DB2 GROUP BUFFER POOL STATUS CONNECTED = *status1* CURRENT DIRECTORY TO DATA RATIO = *ratio1* PENDING DIRECTORY TO DATA RATIO = *ratio2* CURRENT GBPCACHE ATTRIBUTE = *gcache1* PENDING GBPCACHE ATTRIBUTE = *gcache2***

Explanation

This message is a section of output from the DISPLAY GROUP BUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB756I **CLASS CASTOUT THRESHOLD = *class-threshold1,class-threshold2* GROUP BUFFER POOL CASTOUT THRESHOLD = *gbp-threshold* % GROUP BUFFER POOL CHECKPOINT INTERVAL = *interval* MINUTES RECOVERY STATUS = *status1* AUTOMATIC RECOVERY = *auto-recovery***

Explanation

This message is a section of output from the DISPLAY GROUP BUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB757I **MVS CFRM POLICY STATUS FOR *structure-name* = *status2* MAX SIZE INDICATED IN POLICY = *psize* KB DUPLEX INDICATOR IN POLICY = *dupstat* CURRENT DUPLEXING MODE = *dupmode* ALLOCATED = *status1***

Explanation

This message is a section of output from the DISPLAY GROUP BUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB758I **ALLOCATED SIZE = *asize* KB VOLATILITY STATUS = *volstat* REBUILD STATUS = *rbldstat* CFNAME = *cfname* CFLEVEL - OPERATIONAL = *cflevel1* CFLEVEL - ACTUAL = *cflevel2***

Explanation

This message is a section of output from the DISPLAY GROUPBUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB759I **NUMBER OF DIRECTORY ENTRIES = *dir#* NUMBER OF DATA PAGES = *data#* NUMBER OF CONNECTIONS = *conn#***

Explanation

This message is a section of output from the DISPLAY GROUPBUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB760I **GBPCACHE OPTION SET TO *value* FOR *gbpname*. IT WILL TAKE EFFECT ON THE NEXT REALLOCATION**

Explanation

This message is issued in response to an ALTER GROUPBUFFERPOOL command that requests a change in the GBPCACHE attribute. It is also issued for the first ALTER GROUPBUFFERPOOL command for a group buffer pool, even when the GBPCACHE option is not specified on the command. (In this case, the message shows YES for the GBPCACHE option.) The new setting takes effect the next time the coupling facility cache structure is allocated.

System action

Processing continues.

System programmer response

Use the MVS command SETXCF START, REBUILD command when you are ready for the change to take effect.

DSNB761I **THE NEW SETTING WILL TAKE EFFECT AFTER THE GBPCACHE ATTRIBUTE HAS BEEN CHANGED TO YES**

Explanation

This message is issued in response to an ALTER GROUPBUFFERPOOL command that requests a change to RATIO, CLASST, GBPOOLT or GBPCHKPT when GBPCACHE NO is also specified on the command or when the current GBPCACHE attribute is NO. The new setting takes effect the next time the coupling facility cache structure is allocated after the GBPCACHE attribute has been changed to YES.

System action

Processing continues.

System programmer response

Use the ALTER GROUPBUFFERPOOL command to change the GBPCACHE attribute to YES and the MVS command SETXCF START, REBUILD when you are ready for the change to take effect.

DSNB762I **DUPLEXING STATISTICS FOR *secondary-gbpname* WRITES CHANGED PAGES = *changed-pages* FAILED DUE TO LACK OF STORAGE = *writes-full* CHANGED PAGES SNAPSHOT VALUE = *changed-pages-snapshot***

Explanation

This message is a section of output from the DISPLAY GROUPBUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB763I ***gbpname* IS NOT DEFINED WITH GBPCACHE NO**

Explanation

This message is a section of output from the DISPLAY GROUPBUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB764I **DUPLEXING STATISTICS FOR *secondary-gbpname* WRITES FAILED DUE TO LACK OF STORAGE = *s2* ASYNC COMPLETION CHECKS = *s3***

Explanation

This message is a section of output from the DISPLAY GROUPBUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB765I **NO CONNLIST REPORT IS GENERATED. THERE ARE NO CONNECTIONS TO THIS GROUP BUFFER POOL.**

Explanation

This message is a section of output from the DISPLAY GROUPBUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB766I **THE CONNLIST REPORT FOLLOWS**

Explanation

This message is a section of output from the DISPLAY GROUPBUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB767I **CONNECTION NAME = *conname*, CONNECTION STATUS = *status* CONNECTOR'S RELEASE = *connector-release***

Explanation

This message is a section of output from the DISPLAY GROUPBUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB768I **THERE ARE NO GROUP BUFFER POOLS DEFINED WITH GBPCACHE NO**

Explanation

This message is a section of output from the DISPLAY GROUPBUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB769I **THE CONNLIST REPORT IS COMPLETE**

Explanation

This message is a section of output from the DISPLAY GROUPBUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB770I **MEMBER DETAIL STATISTICS ARE NOT AVAILABLE FOR THE GROUP BUFFER POOL. THIS DB2 HAS NEVER BEEN CONNECTED TO THE GROUP BUFFER POOL.**

Explanation

This message is a section of output from the DISPLAY GROUPBUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB771I **INCREMENTAL MEMBER DETAIL STATISTICS SINCE *basetime***

Explanation

This message is a section of output from the DISPLAY GROUPBUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB772I **CUMULATIVE MEMBER DETAIL STATISTICS SINCE *basetime***

Explanation

This message is a section of output from the DISPLAY GROUPBUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB773I **MEMBER DETAIL STATISTICS SYNCHRONOUS READS DUE TO BUFFER INVALIDATION DATA RETURNED = *r1* DATA NOT RETURNED = *r2***

Explanation

This message is a section of output from the DISPLAY GROUPBUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB774I **DUE TO DATA PAGE NOT IN BUFFER POOL DATA RETURNED = *r3* DATA NOT RETURNED = *r4***

Explanation

This message is a section of output from the DISPLAY GROUPBUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB775I **PREFETCH READS DATA NOT RETURNED = *r5***

Explanation

This message is a section of output from the DISPLAY GROUP BUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB776I **SYNCHRONOUS WRITES CHANGED PAGES = *w1* CLEAN PAGES = *w2***

Explanation

This message is a section of output from the DISPLAY GROUPBUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB777I **ASYNCHRONOUS WRITES CHANGED PAGES = *changed-pages-count* CLEAN PAGES = *clean-pages-count* FAILED DUE TO LACK OF STORAGE = *failed-writes-count* WRITE-AROUND PAGES= *write-around-count***

Explanation

This message is a section of output from the DISPLAY GROUPBUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB778I **CASTOUT THRESHOLDS DETECTED FOR CLASSES = *t1* FOR GROUP BUFFER POOL = *t2* GBP CHECKPOINTS TRIGGERED = *k1* PARTICIPATION IN REBUILD = *k2***

Explanation

This message is a section of output from the DISPLAY GROUPBUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB780I **GROUP DETAIL STATISTICS ARE NOT AVAILABLE FOR THE GROUP BUFFER POOL. THIS Db2 IS NOT CURRENTLY CONNECTED TO THE GROUP BUFFER POOL.**

Explanation

This message is a section of output from the DISPLAY GROUPBUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB781I **GROUP DETAIL STATISTICS ARE NOT AVAILABLE FOR THE GROUP BUFFER POOL. MVS IXLCACHE RETURN CODE = *retcode* MVS IXLCACHE REASON CODE = *reason***

Explanation

This message is a section of output from the DISPLAY GROUPBUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB782I **INCREMENTAL GROUP DETAIL STATISTICS SINCE *basetime***

Explanation

This message is a section of output from the DISPLAY GROUPBUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB783I **CUMULATIVE GROUP DETAIL STATISTICS SINCE *basetime***

Explanation

This message is a section of output from the DISPLAY GROUPBUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB784I **GROUP DETAIL STATISTICS READS DATA RETURNED = *r1***

Explanation

This message is a section of output from the DISPLAY GROUPBUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB785I **DATA NOT RETURNED DIRECTORY ENTRY EXISTED = *r2* DIRECTORY ENTRY CREATED = *r3* DIRECTORY ENTRY NOT CREATED = *r4*, *r5***

Explanation

This message is a section of output from the DISPLAY GROUPBUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB786I **WRITES CHANGED PAGES= *w1* CLEAN PAGES = *w2* FAILEDDUE TO LACK OF STORAGE = *w3* CHANGED PAGES SNAPSHOT VALUE= *p1***

Explanation

This message is a section of output from the DISPLAY GROUPBUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB787I **RECLAIMS FOR DIRECTORY ENTRIES = *d1* FOR DATA ENTRIES = *d2* CASTOUTS= *c1***

Explanation

This message is a section of output from the DISPLAY GROUPBUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB788I **CROSS INVALIDATIONS DUE TO DIRECTORY RECLAIMS = *x1* DUE TO WRITES = *x2* EXPLICIT = *x3***

Explanation

This message is a section of output from the DISPLAY GROUPBUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB789I **REGISTER PAGE LIST = *r7* PAGES RETRIEVED = *r8***

Explanation

This message is a section of output from the DISPLAY GROUPBUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB790I **DISPLAY FOR GROUP BUFFER POOL *gbpname* IS COMPLETE**

Explanation

This message is a section of output from the DISPLAY GROUPBUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB791I **THIS DB2 IS NOT CONNECTED TO *gbpname***

Explanation

This message is a section of output from the DISPLAY GROUPBUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB792I **NO DB2 IN THE GROUP IS CONNECTED TO *gbpname***

Explanation

This message is a section of output from the DISPLAY GROUPBUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB793I **DELETE NAME LIST = *s5* READ CASTOUT STATISTICS = *s6* DELETE NAME = *s7* OTHER ASYNCHRONOUS GBP REQUESTS = *s8***

Explanation

This message is a section of output from the DISPLAY GROUPBUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB794I **THIS DB2 IS NOT CONNECTED TO ANY GROUP BUFFER POOL**

Explanation

This message is a section of output from the DISPLAY GROUPBUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB795I **NO DB2 IN THE GROUP IS CONNECTED TO ANY GROUP BUFFER POOL**

Explanation

This message is a section of output from the DISPLAY GROUPBUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB796I **CASTOUTS PAGES CASTOUT = *c1* UNLOCK CASTOUT = *c2* READ CASTOUT CLASS = *c3* READ CASTOUT STATISTICS = *c4* READ DIRECTORY INFO = *c5***

Explanation

This message is a section of output from the DISPLAY GROUPBUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB797I **OTHER INTERACTIONS REGISTER PAGE = *o1* UNREGISTER PAGE = *o2* DELETE NAME = *o3* READ STORAGE STATISTICS = *o4* EXPLICIT CROSS INVALIDATIONS = *o5* ASYNCHRONOUS GBP REQUESTS = *o6***

Explanation

This message is a section of output from the DISPLAY GROUPBUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB798I **LAST GROUP BUFFER POOL CHECKPOINT *timestamp* GBP CHECKPOINT RECOVERY LRSN = *lrsn* STRUCTURE OWNER = *member-name***

Explanation

This message is a section of output from the DISPLAY GROUPBUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB799I **SECONDARY GBP ATTRIBUTES ALLOCATED SIZE = *ssize* KB VOLATILITY STATUS = *svolstat* CFNAME = *cfname* CFLEVEL - OPERATIONAL = *cflevel1* CFLEVEL - ACTUAL = *cflevel2* NUMBER OF DIRECTORY ENTRIES = *sdir#* NUMBER OF DATA PAGES = *sdata#***

Explanation

This message is a section of output from the DISPLAY GROUPBUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB800I **DIRECTORY ENTRY TO DATA PAGE RATIO SET TO *value* FOR *gbpname*. IT WILL TAKE EFFECT ON THE NEXT REALLOCATION**

Explanation

This message is issued in response to an ALTER GROUPBUFFERPOOL command that requests a change to the directory entry to the data page ratio for a group buffer pool. It is also issued for the first ALTER GROUPBUFFERPOOL command for a group buffer pool, even when no ratio value is specified on the command (in this case, the default ratio value is being used). The new ratio takes effect the next time the coupling facility cache structure is allocated.

The directory entry to data page ratio determines the number of directory entries and the number of data pages that are allocated in the coupling facility cache structure for the group buffer pool. If the coupling facility structure is not allocated, the first connect from any Db2 causes allocation of the structure and the new directory entry to data page ratio to take effect.

If the structure size can be determined from the MVS CFRM administrative policy, message DSNB801I is issued to indicate an estimate of the number of

directory and data entries that are allocated based on the new ratio and the current size of the coupling facility structure. Otherwise, message DSNB812I is issued.

System action

Processing continues.

System programmer response

Use the -DISPLAY GROUPBUFFERPOOL command to display the number of allocated directory and data entries.

DSNB801I **MAX STRUCTURE SIZE INDICATED IN MVS CFRM POLICY = *size* KB ESTIMATED NUMBER OF DIRECTORY ENTRIES = *dir#* ESTIMATED NUMBER OF DATA PAGES = *data#***

Explanation

This message is issued in response to an ALTER GROUPBUFFERPOOL command after the directory entry to data page ratio is successfully updated. It is also issued for the first ALTER GROUPBUFFERPOOL command for a group buffer pool, even when no ratio value is specified on the command (in this case, the default ratio value is used). The group buffer pool is identified in message DSNB800I, which immediately precedes this message.

Because the actual ratio change does not take affect until the group buffer pool is reallocated, this message shows the estimated number of directory entries and data pages that are allocated based on the new ratio and the maximum size of the coupling facility structure, as indicated in the active CFRM policy definition. The actual number of entries that are allocated varies based on the amount of coupling facility storage that is available at the time the allocation is attempted, and on the amount of storage overhead necessary for the coupling facility control structures. Because Db2 cannot determine these variables, the estimated number of directory and data entries displayed in this message assumes that the entire storage allocation for the coupling facility cache structure will be used for directory and data entries, which is not the case.

System action

Processing continues.

Related concepts

Tuning group buffer pools (Db2 Data Sharing Planning and Administration)

Related tasks

Changing the ratio of directory to data entries (Db2 Data Sharing Planning and Administration)

Related reference

Group buffer pool monitoring with the DISPLAY GROUPBUFFERPOOL command (Db2 Data Sharing Planning and Administration)

-ALTER GROUPBUFFERPOOL (Db2) (Db2 Commands)

-DISPLAY GROUPBUFFERPOOL (Db2) (Db2 Commands)

Related information

DSNB750I

DISPLAY FOR GROUP BUFFER POOL *gbpname* FOLLOWS

DSNB800I

DIRECTORY ENTRY TO DATA PAGE RATIO SET TO *value* FOR *gbpname*. IT WILL TAKE EFFECT ON THE NEXT REALLOCATION

DSNB802I **"*value*" IS NOT A VALID PARAMETER FOR 'RATIO'**

Explanation

An illegal value for the RATIO parameter was specified for an ALTER GROUPBUFFERPOOL command. The RATIO value can be up to 6 characters, and must be a decimal number from 1.0 to 255 (inclusive). For values less than 25, any digits after the first decimal place are ignored. If the value for the RATIO parameter is greater than or equal to 25, any digits after the decimal point are ignored. Informational message DSNB803I is displayed if the system ignores any precision that exceeds the limits of the RATIO parameter.

System action

The request is rejected.

System programmer response

Reissue the ALTER GROUPBUFFERPOOL command, and specify an acceptable value for RATIO.

DSNB803I **RATIO IS TRUNCATED TO *value***

Explanation

The precision specified on the RATIO parameter on an ALTER GROUPBUFFERPOOL command was greater than allowed. For decimal numbers less than 25, any digits after the first decimal place are ignored: for example, 5.67 is treated as 5.6. For decimal numbers greater than or equal to 25, any digits after the

decimal point are ignored: for example, 25.3 is treated as 25.

System action

Processing continues.

DSNB804I **CLASS CASTOUT THRESHOLD SET TO *class-threshold1*,*class-threshold2* FOR *gbp-name***

Explanation

This message is issued in response to an ALTER GROUPBUFFERPOOL command that requests a change to the class castout threshold value for a group buffer pool. It is also issued for the first ALTER GROUPBUFFERPOOL command for a group buffer pool, even when no threshold value is specified on the command (in this case, the default class castout threshold value is used).

class-threshold1
The threshold at which class castouts are to be initiated, expressed as a percentage of the group buffer pool size

class-threshold2
The threshold at which class castouts are to be initiated, expressed as an absolute number of buffers. *class-threshold2* is used to determine the threshold only if *class-threshold1* is zero and *class-threshold2* is non-zero. Otherwise, *class-threshold1* is used to determine the threshold.

gbp-name
The name of the group buffer pool.

System action

Processing continues.

User response

No action is required.

Related reference

-ALTER GROUPBUFFERPOOL (Db2) (Db2 Commands)

DSNB805I ***specified-value* IS NOT A VALID PARAMETER FOR 'CLASST'**

Explanation

An illegal value was specified on the CLASST (*class-threshold1*,*class-threshold2*) keyword on an ALTER GROUPBUFFERPOOL command. The *class-threshold1* value must be an integer between 0 and 90, inclusive. The *class-threshold2* value must be an integer between 0 and 32767, inclusive.

specified-value
The specified value for CLASST.

System action

The request is rejected.

System programmer response

Reissue the ALTER GROUPBUFFERPOOL command, specifying an acceptable value for CLASST.

Related reference

-ALTER GROUPBUFFERPOOL (Db2) (Db2 Commands)

DSNB806I **GROUP BUFFER POOL CASTOUT THRESHOLD SET TO *value*% FOR *gbpname***

Explanation

This message is issued in response to an ALTER GROUPBUFFERPOOL command that successfully changes the group buffer pool castout threshold value for a group buffer pool. It is also issued for the first successful ALTER GROUPBUFFERPOOL command for a group buffer pool, even when no threshold value is specified on the command (in this case, the default group buffer pool castout threshold value is being used).

System action

Processing continues.

DSNB807I ***value* IS NOT A VALID PARAMETER FOR 'GBPOOLT'**

Explanation

An ALTER GROUPBUFFERPOOL command was issued with an illegal value specified on the GBPOOLT (group buffer pool castout threshold) keyword. The GBPOOLT value must be an integer between 0 and 90, inclusive.

System action

The request is rejected.

System programmer response

Reissue the -ALTER GROUPBUFFERPOOL command, specifying an acceptable value for GBPOOLT.

DSNB808I **GROUP BUFFER POOL CHECKPOINT INTERVAL SET TO *value* MINUTES FOR *gbpname***

Explanation

This message is issued in response to an ALTER GROUPBUFFERPOOL command that successfully changes the group buffer pool checkpoint interval value for a group buffer pool. It is also issued for the first successful ALTER GROUPBUFFERPOOL command for a group buffer pool, even when no interval value is specified on the command (in this case, the default group buffer pool checkpoint interval value is being used).

System action

Processing continues.

DSNB809I ***value*** **IS NOT A VALID PARAMETER FOR 'GBPCHKPT'**

Explanation

An ALTER GROUPBUFFERPOOL command was issued with an illegal value specified on the GBPCHKPT (group buffer pool checkpoint) keyword. The GBPCHKPT value must be an integer between 1 and 999999, inclusive.

System action

The request is rejected.

System programmer response

Reissue the -ALTER GROUPBUFFERPOOL command, specifying an acceptable value for GBPCHKPT.

DSNB812I **SIZE ESTIMATES ARE NOT AVAILABLE FOR THE GROUP BUFFER POOL MVS IXCQUERY RETURN CODE =** ***return code*** **MVS IXCQUERY REASON CODE =** ***reason code***

Explanation

The directory entries and data pages estimates for the group buffer pool, identified on the preceding DSNB800I message, could not be computed because IXCQUERY was unable to obtain the backing structure's size information from the MVS CFRM administrative policy definition. This can happen if an IXCQUERY processing error occurred, or if the structure was not defined in the CFRM policy. The backing structure for the group buffer pool must be defined in the CFRM policy before the group buffer pool can be allocated. The exact reason can be determined from the *return code* and the *reason code*. For an explanation of the IXCQUERY codes, see *MVS/ESA Programming: Sysplex Services Reference*.

System action

The command completes successfully, but without giving the estimates.

DSNB813I ***csect-name*** **ALTER NOTIFICATION FAILED**

Explanation

An ALTER GROUPBUFFERPOOL command failed to propagate the request for castout threshold or checkpoint interval change to other DB2s in the data sharing group. This error is triggered by an error encountered by the IRLM notification process. As a result, different DB2s in the group might have different values for the castout threshold or checkpoint interval. The RATIO change does not use the notification process and is, therefore, not affected by such a failure.

System action

Processing continues.

System programmer response

Reissue the -ALTER GROUPBUFFERPOOL command with the same parameters. If the problem persists, it indicates a deeper problem, such as inadequate space for the locking structures.

DSNB814I ***csect-name*** **NO CHANGES REQUESTED ON COMMAND**

Explanation

An ALTER GROUPBUFFERPOOL command without any parameters was issued for an existing group buffer pool. If an ALTER GROUPBUFFERPOOL command without any parameters is issued for a group buffer pool that does not yet exist, a group buffer pool definition with default parameters values is created.

System action

The command is successful and processing continues.

DSNB815I **PAGE P-LOCK LOCK/UNLOCK, REQUESTS FOR SPACE MAP =** ***nn*** **REQUESTS FOR DATA PAGES =** ***nn*** **REQUESTS FOR INDEX LEAF =** ***nn*** **UNLOCK REQUESTS =** ***nn***

Explanation

This message is a section of output from the DISPLAY GROUPBUFFERPOOL command, which is part of message “DSNB750I” on page 94.

DSNB816I **PAGE P-LOCK SUSPENSIONS/ NEGOTIATIONS, SUSPENSIONS FOR SPACE MAP = *nn* P-LOCK SUSPENSIONS FOR DATA = *nn* P-LOCK SUSPENSIONS FOR INDEX LEAF = *nn* NEGOTIATIONS FOR SPACE MAP = *nn* P-LOCK NEGOTIATIONS FOR DATA PAGES = *nn* NEGITIATIONS FOR INDEX LEAF PAGES = *nn***

Explanation

This message is a section of output from the DISPLAY GROUPBUFFERPOOL command, which is part of message "DSNB750I" on page 94.

DSNB890I ***command-verb gbp-kwd* COMMAND IS ONLY VALID FOR DATA SHARING**

Explanation

An attempt was made to issue a GROUPBUFFERPOOL command on a Db2 that was not initialized to participate in data sharing.

command-verb
The name of the command attempted: ALTER, or DISPLAY

gbp-kwd
The keyword GROUPBUFFERPOOL or GBPOOL

System action

The command request is rejected.

DSNB891I ***name* IS NOT A VALID GROUP BUFFER POOL OR COUPLING FACILITY STRUCTURE NAME**

Explanation

An invalid name was specified on an ALTER GROUPBUFFERPOOL or DISPLAY GROUPBUFFERPOOL command.

name
Either the Db2 group buffer pool name or the backing coupling structure name

You must either specify the Db2 group buffer pool name (*gpbname*) or the backing coupling facility structure name (*strname*). Acceptable values for *gbpname* are GBP0, GBP1, ... , GBP49, GBP32K, GBP32K1, ... , GBP32K9. The *strname* has the following format:

```
groupname_gbpname
```

The *groupname* is the Db2 data sharing group name. The underscore (_) is used as a delimiter between the *groupname* and the *gbpname*.

System action

The request is rejected.

System programmer response

Reissue the command specifying a valid group buffer pool name.

DSNB892I ***grpname* IS NOT A VALID GROUP NAME FOR THIS DB2**

Explanation

The group name specified as part of the full coupling facility cache structure name on an ALTER GROUPBUFFERPOOL or DISPLAY GROUPBUFFERPOOL command is incorrect. On the commands, you can specify either the correct 16-byte coupling facility cache structure name or the Db2 group buffer pool name. The coupling facility cache structure name is a 16-character name specified as follows:

```
groupname_gbpname
```

The *gbpname* can be GBP0, GBP1, ..., GBP49 GBP32K, GBP32K1, ..., GBP32K9. The *groupname* is the Db2 data sharing group name. The underscore (_) is used as a delimiter between the *groupname* and the *gbpname*. The coupling facility cache structure names are left-justified with a blank as the rightmost padding character. Db2 adds the padding blanks if they are not specified on the command.

System action

The request is rejected.

System programmer response

Reissue the command, specifying a valid group buffer pool name.

Chapter 3. DSNE messages

Message identifiers that begin with DSNE communicate information about the TSO attachment facility.

In the TSO attachment facility, the user can control whether message IDs are displayed. To see them, type PROFILE MSGID. To suppress them, type PROFILE NOMSGID.

Trace messages associated with the TSO attachment facility (including DSN and DB2I) are not listed in this documentation. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

All DSN command processor trace messages have the same message number: DSNET20I.

DSNET20I

Explanation

This is one of many possible trace messages bearing this message number. For information about TSO attachment facility trace messages that have this message number, see TSO attachment facility trace messages (Diagnosing Db2 problems).

DSNE004E PROBABLE SUBSYSTEM ERROR DETECTED IN CSECT csect-name, SUBSYSTEM FUNCTION service, RETCODE retcode, REASON CODE reason-code

Explanation

A subsystem error has occurred. The function identified in the message as 'service' is either an MVS or a Db2 service routine. The error was discovered in the 'csect-name' indicated in the message. Refer to the appropriate MVS publications for a description of the return and reason codes.

System action

This message is sometimes followed by an intentional system abend. In other instances, the DSN command processor will terminate the current subcommand and attempt to continue by issuing another DSN prompt.

User response

Run the job again with a SYSUDUMP dump data set allocated and DSN tracing set to 123. Collect the DSN trace stream. If an abend occurs, collect the dump.

DSNE005A EXECUTION IS INTERRUPTED. ENTER C TO CANCEL, OR ANY OTHER REPLY TO RESUME THE subcmd SUBCOMMAND

Explanation

The Attention key was pressed. Entering a 'C' will cancel the DSN subcommand that is currently executing. If the user enters a question mark, message DSNE006A will appear. Any other reply will cause execution of the subcommand that was in progress to continue.

If the DSN prompt was issued just before the Attention key was pressed, 'subcmd' may be either 'DSN' or the previously invoked subcommand.

User response

Enter a 'C' to cancel the Db2 subcommand currently executing. The DSN prompt will appear on the terminal. Enter anything else (except another attention) to resume execution.

DSNE006A C WILL TERMINATE THE SUBCOMMAND WITH UNCOMMITTED CHANGES BACKED OUT

Explanation

Enter a 'C' to terminate the subcommand. No uncommitted changes are made to the database. Any other reply causes subcommand execution to continue.

User response

Enter a 'C' to terminate the subcommand. Control returns to DSN, and the DSN prompt appears on the terminal. This is a second-level help message associated with message DSNE005A.

DSNE008I REPLY WAS xxxxx, EXECUTION RESUMED

Explanation

Execution was suspended by a user ATTENTION and then was resumed, because the string specified in the message as 'xxxxx' was entered.

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System action

Control returns to the interrupted session.

DSNE009I REPLY WAS C, EXECUTION TERMINATED

Explanation

The response to message DSNE005A was a C. This caused the current subcommand to terminate.

System action

The current subcommand is terminated. The DSN prompt appears on the terminal.

User response

You can now enter another DSN subcommand.

DSNE010I SUBCOMMAND subcmd CANCELED BY ATTENTION

Explanation

The subcommand specified in the messages was canceled because the user pressed the attention key and then entered a 'C'.

System action

The current subcommand is terminated. The DSN prompt appears on the terminal.

User response

A new subcommand can be entered.

DSNE011I DSN COMMAND CANCELED BY ATTENTION

Explanation

The user of the DSN command processor has pressed attention. Since this occurred before DSN was fully initialized, DSN terminates. If DSN had been fully initialized, it would have prompted the user to continue or cancel.

System action

The DSN command processor terminates. Control returns to TSO or the calling CLIST.

User response

Restart DSN.

DSNE100I ssid NOT OPERATIONAL, RETRY COUNT IS ZERO

Explanation

The subsystem (specified in the message as 'ssid') was not active, and no retries remain to be executed. No more connection attempts are made. The operator should be notified to start this specific subsystem, and the DSN command should be resubmitted. Issue the DSN command with the RETRY parameter set greater than zero.

System action

Control returns to TSO.

Operator response

Start the subsystem with the 'ssid' specified in the message.

User response

Notify the operator to start the subsystem.

DSNE101I ssid NOT OPERATIONAL, WILL RETRY nnn MORE TIMES

Explanation

The requested Db2 subsystem 'ssid' was not started or is not available. Connection to it will be attempted 'nnn' more times. This message is issued every 30 seconds (and each time 'nnn' is decreased by 1) until the connection is made or 'nnn' is zero.

System action

DSN repeats the connection attempt until the connection is made or until the retry count is decreased to zero.

User response

Notify the operator start Db2.

DSNE102I YOU ARE NOT AUTHORIZED TO USE DB2 SUBSYSTEM ssid

Explanation

The authorization ID is not authorized to use subsystem 'ssid'.

System action

Control returns to TSO.

User response

Contact the system programmer, or system administrator to arrange for the required RACF or equivalent security system authorization.

DSNE103E MAIN STORAGE REQUEST FROM csect-id FAILED

Explanation

A request for main storage failed.

System action

The TSO attachment facility is ready for more input.

User response

Increase the address space size. This can be done as part of the logging on process.

DSNE104E RETRY COUNT OF number NOT VALID, SET TO 120

Explanation

An invalid 'RETRY' parameter was entered on the DSN command. It has been set to 120. Valid retry counts are integer numbers from 0 to 120.

System action

Retry count is modified, and DSN execution continues.

User response

The next time you invoke DSN, use a RETRY count of 0 to 120.

DSNE105E SUBSYSTEM ssid NO LONGER OPERATIONAL

Explanation

The Db2 subsystem is down. It must be restarted before the user can continue.

System action

Control returns to TSO attachment facility.

User response

Before you can continue, Db2 must be restarted. You must also reissue the DSN command. ISPF users should restart their jobs.

DSNE106E PLAN plan-id NOT AUTHORIZED FOR SUBSYSTEM ssid AND AUTH-ID auth-id

Explanation

The requested combination of plan-id, subsystem-id, and user-id is not currently authorized.

System action

The TSO attachment facility is ready for more input.

System programmer response

The system administrator for the Db2 subsystem can arrange the necessary authorization.

User response

Notify the system programmer or system administrator to obtain proper authorization.

DSNE107E SUBSYSTEM RESOURCE NEEDED FOR PLAN plan-name, AUTH ID auth-id, AND SUBSYSTEM subsys IS NOT AVAILABLE

Explanation

The Db2 subsystem was unable to allocate a necessary resource for the requested combination of plan-id, user-id, and subsystem-id. This message is accompanied by DSNE108E. An attempt to establish connection with the Db2 subsystem has failed.

System action

The TSO attachment facility is ready for more input.

User response

Arrange to obtain the needed resource, and resubmit the subcommand. See the explanation for message DSNE108E, which accompanies this message.

DSNE108E FEEDBACK - REASON CODE *reason-code* TYPE= *resource-type* RESOURCE NAME - *resource-name*

Explanation

This message accompanies message DSNE107E or DSNE114E to explain the problem more clearly.

reason-code
The reason code for the message.

resource-type* and *resource-name
The type and name of the resource that the message identifies. For an explanation of *resource-type* and *resource-name* values, see Appendix C, “Resource types,” on page 1171.

System action

The TSO attachment facility is ready for more input.

User response

Arrange for the missing resource to be available, and resubmit your job.

Related concepts

Db2 reason codes (Db2 Codes)

Related information

Resource types

Type codes are associated with particular types of resources.

DSNE107E

SUBSYSTEM RESOURCE NEEDED FOR PLAN plan-name, AUTH ID auth-id, AND SUBSYSTEM subsys IS NOT AVAILABLE

DSNE114E

THE COMBINATION OF PLAN planid, AUTH ID auth-id, AND SUBSYSTEM ssid IS NOT VALID

DSNE109E NO INPUT TO BIND, SUBCOMMAND TERMINATED

Explanation

No LIBRARY parameter was specified on the BIND subcommand. No DBRMLIB was allocated.

System action

The TSO attachment facility is ready for more input.

User response

Specify the LIBRARY parameter, and resubmit the BIND subcommand. Alternatively, you could issue an ALLOCATE command for the DDNAME DBRMLIB and then resubmit the BIND subcommand as originally written.

DSNE110E *ssid* NOT VALID SUBSYSTEM ID, COMMAND TERMINATED

Explanation

There is no subsystem id with the name identified in the message as 'ssid'. The subsystem identifier you specify (or default to) on the DSN command must exist. This message is the result of specifying (or defaulting to) a nonexistent subsystem identifier.

System action

The DSN processor ends, and control returns to TSO.

User response

Reissue the command with a valid SYSTEM parameter.

Related concepts

DSN command processor (Db2 Application programming and SQL)

Related reference

DSN (TSO) (Db2 Commands)

DSNE111E INSTALLATION EXIT REJECTED DSNAME data-set-name

Explanation

A local installation-supplied exit has rejected the data set name identified in the message as 'data-set-name'.

System action

The TSO attachment facility is ready for more input.

User response

Either correct the data set name specified, or arrange to authorize the original data set name. Resubmit the request.

DSNE112E userid STILL SIGNED ON TO SUBSYSTEM ssid

Explanation

An attempt was made to sign on to Db2 when the user was already signed on.

System action

Control returns to TSO.

User response

Log off and log on again.

DSNE113E NOT ABLE TO LINK TO PROGRAM *program-name* IN DSNAME *dataset-name*.

Explanation

A TSO attachment error occurred during an attempt to link to program *program-name* in data set *dataset-name*.

program-name
The name of the program.

dataset-name
The name of the data set.

System action

The TSO attachment facility is ready for more input.

User response

Check that the program exists and that its name is spelled correctly. Enter the correct program name.

DSNE114E THE COMBINATION OF PLAN planid, AUTH ID auth-id, AND SUBSYSTEM ssid IS NOT VALID

Explanation

The resource in message DSNE108E, which will follow this message, is not a valid resource name.

System action

The TSO attachment facility is ready for more input.

User response

Correct the invalid combination, and resubmit the subcommand. The problem is probably caused by a user spelling error. If it is not, check with the system administrator to determine the availability of the needed resource. Your program may need to be bound. See the explanation for message DSNE108 (which accompanies this one) for more information.

DSNE117E NOT ABLE TO LOCATE membername IN DSNAME data-set-name

Explanation

The 'data-set-name' specified does not contain the member the user wanted to run.

System action

Control remains with the DSN command processor, and the DSN prompt appears on the terminal. The DSN command processor is ready for another command.

User response

Correct the PROGRAM or LIBRARY parameter, and resubmit the subcommand.

DSNE118E invalid-command NOT VALID COMMAND

Explanation

The user entered an invalid command. A typing error may be responsible. You may be trying to run a command processor that is either not available on your system or that is not part of your current LNKLST or STEPLIB concatenation.

System action

The TSO attachment facility is ready for more input.

User response

Either correct the spelling error, or rearrange your library concatenation so that you can access the required command processor. Resubmit the command.

DSNE119E data-set-name NOT PARTITIONED DATA SET

Explanation

The user tried to allocate a sequential data set when a partitioned data set was required.

System action

The TSO attachment facility is ready for more input.

User response

Check the data-set-name. The data set you specified is sequential, but you specified a member name. Remove the member name, and resubmit the job.

DSNE120E data-set-name NOT SEQUENTIAL DATA SET

Explanation

The user tried to allocate a partitioned data set when a sequential data set was required.

System action

The TSO attachment facility is ready for more input.

User response

Check the data-set-name. The data set you specified is partitioned, but you did not specify a member name. Add a member name, and resubmit the job.

DSNE121E *csect-id* NOT ABLE TO OPEN DATA SET

Explanation

The Db2 subsystem was unable to open the requested data set.

System action

The TSO attachment facility is ready for more input.

User response

For information about why the data set could not be opened, read the explanations of the messages that accompany this message. Correct the condition, and resubmit the job.

DSNE122E DATA SET ORGANIZATION MUST BE EITHER SEQUENTIAL OR PARTITIONED. data-set-name IS NOT

Explanation

The Db2 subsystem was unable to open data set 'data-set-name', because it is not a sequential or partitioned data set.

System action

The TSO attachment facility is ready for more input.

User response

Correct the data-set-name, or change the data set organization. Resubmit the job.

DSNE123I *data-set-name* NOT PARTITIONED DATA SET, IT IS IGNORED

Explanation

The data-set-named in the message is required to be partitioned. It is not and, consequently, was ignored.

System action

DSN will attempt to continue BIND processing.

User response

Correct the subcommand, and resubmit it.

DSNE124E DATA SET *data-set-name*, MEMBER *member-name* IN USE, TRY LATER

Explanation

The member contained in 'data-set-name' is currently in use. This message is normally issued when another user is updating the specified member.

System action

The TSO attachment facility is ready for more input.

User response

Wait until the member is available and reissue your DCLGEN request.

DSNE125E DATA SET *data-set-name* IN USE, TRY LATER

Explanation

The sequential data set 'data-set-name' is currently in use. This message is normally issued when another user is updating the specified data set.

System action

The TSO attachment facility is ready for more input.

User response

Wait until the data set is available and reissue your DCLGEN request.

DSNE126E THE DB2 OPERATOR IS STOPPING THE SUBSYSTEM. PLEASE END YOUR DSN SESSION

Explanation

The operator has requested that Db2 quiesce. The user should promptly finish the current task and terminate the DSN session so that this can take place. This message may be followed by message DSNE127I.

System action

No new users will be permitted to initiate Db2 sessions. Current users will be permitted to work until they terminate their connections to Db2.

User response

End your DSN session as soon as possible.

DSNE127I THE DB2 OPERATOR IS STOPPING THE SUBSYSTEM. DSN IS TERMINATING

Explanation

The operator has requested that Db2 terminate.

System action

Db2 will shut down, interrupting user activities as necessary. DSN will terminate immediately and return the user to TSO.

User response

Reinitiate your session when Db2 returns.

DSNE128I DB2 IS ABNORMALLY ENDING. DSN IS TERMINATING

Explanation

Db2 has encountered a problem from which it cannot recover.

System action

Db2 is abending. DSN terminates immediately and returns the user to TSO.

User response

Reinitiate your session when Db2 returns.

DSNE130I MAXIMUM NUMBER OF DB2 USERS REACHED. YOUR RETRY COUNT IS ZERO

Explanation

The number of concurrent connections to Db2 is restricted. The number is specified in the installation parameters in member DSN6SYSP. For TSO foreground, see parameter IDFORE. For background jobs, see parameter IDBACK. The DSN request has been denied, because the current number of Db2 connections in the system has reached the installation-specified limit.

System action

Control returns to TSO.

User response

Resubmit the DSN command when activity using Db2 has diminished. If still unsuccessful, see the system programmer about the installation parameters.

DSNE131I MAXIMUM NUMBER OF DB2 USERS REACHED. WILL RETRY *nnn* MORE TIMES

Explanation

The number of concurrent connections to Db2 is restricted. The number is specified in the installation parameters in member DSN6SYSP. For TSO foreground, see the value of the IDFORE subsystem parameter. For background jobs, see the value of the IDBACK subsystem parameter. The DSN request was denied because the current number of Db2 connections in the system reached the installation specified limit.

The DSN connection to Db2 is attempted *nnn* more times. The number of retries is determined by the RETRY parameter on the DSN command.

This message is issued every 30 seconds (and each time *nnn* is decreased by 1) until the connection is made or until *nnn* is decreased to zero.

System action

DSN repeats the connection attempt until the connection is made or the retry count is decreased to 0.

User response

If all retry attempts fail, resubmit the DSN command when Db2 activity diminishes. If still unsuccessful, see the system programmer about the installation parameters.

Related tasks

Setting thread limits (Db2 Performance)

Setting TSO options for threads (Db2 Performance)

Related reference

DSN (TSO) (Db2 Commands)

MAX TSO CONNECT field (IDFORE subsystem parameter) (Db2 Installation and Migration)

MAX BATCH CONNECT field (IDBACK subsystem parameter) (Db2 Installation and Migration)

Related information

About Db2 and related commands (Db2 Commands)

DSNE132I DB2 IS OPERATING IN RESTRICTED ACCESS MODE. MAINTENANCE PERSONNEL ONLY

Explanation

Db2 is not available for normal operation. It is only available to service personnel.

System action

Control returns to the caller. Your request was not processed. The DSN command processor was unable to connect to Db2.

User response

Wait until Db2 is available for general use, then resubmit your request.

DSNE133E *csect-name* RELEASE LEVELS NOT COMPATIBLE. DSN=*release_level*, DB2=*release_level*

Explanation

The DSN command processor, perhaps running under the control of DB2I, has detected a release level incompatibility between itself and Db2. The current *release_level* of the DSN command processor code and the Db2 subsystem load modules is indicated as a string of three numeric characters as follows:

- Version
- Release
- Modification level

System action

The DSN command processor terminates.

Operator response

Notify the system programmer.

System programmer response

If you are unable to determine the problem, you can trace DSN execution through DB2I or the DSN command processor.

User response

Check that your method of invoking DSN or DB2I allocates the correct libraries for DSN. If you used JCL or a TSO logon procedure to execute DSN code, check your JOBLIB and STEPLIB allocations. If you used a CLIST to execute DSN, ensure that you obtained the correct version of the DSN code. See your system programmer if you invoke DSN using procedures supplied by your system programmer.

Problem determination

Ensure that coexistence is supported on both release levels (DSN and Db2). If coexistence is supported, ensure that the lower level release has the correct SPE level code support that is required to coexist with the current higher level release.

For more information about coexistence and SPEs, refer to the program directory or preventative service planning (PSP) updates.

DSNE136I DB2 IS OPERATING IN RESTART LIGHT MODE. INDOUBT RESOLUTION ONLY

Explanation

The Db2 member is not available for normal operation. It is only available to commit coordinators that have indoubt units of recovery that need to be resolved with this member.

System action

Control returns to the caller. Your request was not processed. The DSN command processor was unable to connect to Db2.

User response

Wait until this Db2 is available for general use, then resubmit your request. Or, request connection to a different Db2 member in the data sharing group (for example, by using the Db2 group attach name).

DSNE137I YOU ARE NOT AUTHORIZED TO CONNECT TO DB2 ASUSER *userid*.

Explanation

The authorization ID is not authorized to use Db2 with the ASUSER *userid*.

System action

The request was not processed.

User response

Contact the system administrator to arrange for the required trusted context authorization.

DSNE138E NOT ABLE TO LINK TO PROGRAM *program-name* IN THE STANDARD SEARCH ORDER. RETURN CODE *return-code*. REASON CODE *reason-code*.

Explanation
A Db2 TSO attachment error occurred during an attempt to link to program *program-name* using the standard load module search order.

program-name
The name of the program.

reason-code
The Db2 reason code value that indicates the reason for the failure. For explanations of reason codes, see Db2 reason codes (Db2 Codes).

reason-code
The reason for the message or SQL code, indicated by one of the following values:

System action:
The TSO attachment facility is ready for more input.

User response:
Correct the program or execution environment, and resubmit the subcommand.

DSNE139E NOT ABLE TO LINK TO MEMBER *member-name* IN THE STANDARD SEARCH ORDER.

Explanation
The member *member-name* was not found using the standard load module search order.

member-name
The member name of a particular Db2 subsystem in a data sharing group.

System action:
Control remains with the DSN command processor, and the terminal displays the DSN command prompt. The DSN command processor is ready for another command.

User response:
Correct the program or execution environment, and resubmit the subcommand.

DSNE140I THE MAXIMUM NUMBER OF SESSIONS HAS BEEN REACHED. YOU WILL NOT BE CONNECTED TO DB2.

Explanation

The authorization ID has exceeded the maximum number of concurrent sessions allowed.

System action

The connection request is not processed.

User response

Ask the system administrator to increase the number of concurrent sessions allowed or to close some of the existing connections, then try the request again.

DSNE231A ONE NAME IS REQUIRED TO FREE A PLAN OR A PACKAGE

Explanation

The user has attempted to use the FREE PLAN or PACKAGE panel without specifying a plan or package name.

System action

The TSO attachment facility is ready for more input.

User response

Enter the name of a plan or package, or (*) to indicate 'all'.

DSNE232A CONNECTION NAME REQUIRES ENABLE/DISABLE OF CONNECTION TYPE

Explanation

The user indicated that specific connection names were to be specified for ENABLE or DISABLE, but the associated connection type field was not updated. The ENABLE or DISABLE of connection names requires the corresponding connection type to also be specified for ENABLE or DISABLE.

System action

The TSO attachment facility is ready for more input.

User response

Enter Y (Yes) on the connection type for the associated connection names.

DSNE233A MEMBER NAME MUST NOT BE SPECIFIED MORE THAN ONCE

Explanation

The LIBRARY field containing the data set name, also contains a member name.

System action

The TSO attachment facility is ready for more input.

User response

The member name must be specified only once, and must be specified on the MEMBER field.

DSNE234A EITHER DBRM MEMBER OR INCLUDE PACKAGE LIST MUST BE SPECIFIED

Explanation

The BIND PLAN subcommand requires either a DBRM member name or a package list as input, neither was specified.

System action

The TSO attachment facility is ready for more input.

User response

Enter a DBRM member name(s), or specify that a package list is to be included. Both options are also allowed.

DSNE235A *plan/package* NAME IS A DUPLICATE OF PRIMARY *plan/package* NAME

Explanation

In addition to the primary 'plan' or 'package' name specified on the REBIND or FREE subcommand panel, the user also specified that additional plans or packages were to be included in the list. The primary 'plan' or 'package' name was again specified to be included in the list.

System action

The duplicate of the primary 'plan' or 'package' name is automatically deleted from the list to avoid errors during subcommand processing. The TSO attachment facility is ready for more input.

User response

Complete the list of additional plans or packages.

DSNE236A SPECIFY A CONNECTION TYPE TO ENABLE OR DISABLE

Explanation

The user indicated that individual connection types were to be ENABLED or DISABLED, but no specific connection types were specified.

System action

The TSO attachment facility is ready for more input.

User response

Enter Y (YES) for each individual connection type to ENABLE, or DISABLE.

DSNE237A SPECIFY ENABLE ALL OR SPECIFIC CONNECTION TYPES

Explanation

In addition to requesting that all connection types be enabled, the user also requested that specific connection types be enabled. The enable of all connection types includes the enable of specific connection types.

System action

The TSO attachment facility is ready for more input.

User response

Specify specific connection types to be enabled, or specify that all connection types are to be enabled.

DSNE240A ISPF RETURNED AN UNEXPECTED CODE WHILE CLOSING A TABLE

Explanation

An ISPF error return code was encountered when attempting to perform a TBCLOSE for an ISPF table while processing the current subcommand panel.

System action

TSO processing for the current subcommand is terminated.

System programmer response

Verify that the ISPF table library allocated to the DSNETBLS DD statement has sufficient space or directory entries available. Also refer to the ISPF error log for additional diagnostic information.

User response

Notify the system programmer.

DSNE241A INTERNAL PROCEDURE WAS PASSED AN INVALID NUMBER OF ARGUMENTS

Explanation

A TSO Interpreter error was encountered while executing a subroutine during the processing of the current subcommand.

System action

TSO processing for the current subcommand is terminated.

System programmer response

Notify IBM Support that an error was encountered in the TSO SYSCALL instruction.

User response

Notify the system programmer.

Problem determination

The TSO SYSCALL instruction is not passing all the parameters to a subroutine defined within the CLIST.

DSNE242A ISPF RETURNED AN UNEXPECTED CODE WHILE SETTING SEARCH ARGUMENTS

Explanation

An ISPF table for the current function does not contain the expected column or table format.

System action

TSO processing for the current subcommand is terminated.

System programmer response

Delete the ISPF table in error. The table is re-created automatically during the next invocation of the DB2I function.

User response

Notify the system programmer.

Problem determination

The format of the ISPF table was changed since the last successful use of the table. Refer to the DB2I ISPF table library allocated to the DSNETBLS DD statement, and examine the ISPF error log for additional diagnostic information.

DSNE243A ISPF RETURNED AN UNEXPECTED CODE DURING A TABLE DISPLAY

Explanation

An ISPF error was encountered when attempting to display a DB2I table panel.

System action

TSO processing for the current subcommand is terminated.

System programmer response

Ensure that the DB2I panel and panel library are established correctly. If the format of both is correct, use ISPF option 7.2 to test the panel for additional errors.

Examine the ISPF error log for additional error information and determine the name of the panel to be displayed.

User response

Notify the system programmer.

DSNE244A CANNOT SAVE CREATED TABLE, VERIFY SPACE IN TABLE LIBRARY

Explanation

An ISPF TBSAVE function returned with a condition code greater than zero.

System action

TSO processing for the current subcommand is terminated.

System programmer response

Verify that the ISPF table library allocated to the DSNETBLS DD statement has sufficient space and directory entries available. Also refer to the ISPF error log for additional diagnostic information.

User response

Notify the system programmer.

DSNE245A ISPF RETURNED AN UNEXPECTED CODE WHILE ADDING A ROW TO A TABLE

Explanation

An ISPF TBADD function returned with a condition code greater than four.

System action

The TSO attachment facility is ready for more input.

System programmer response

Verify that the user has enough memory to perform ISPF functions. Also refer to the ISPF error log for additional diagnostic information.

User response

Enter the DB2I CANCEL command, and notify the system programmer.

DSNE246A ISPF RETURNED AN UNEXPECTED CODE WHILE DELETING A ROW

Explanation

An ISPF TBDELETE function returned with a condition code greater than zero.

System action

TSO processing for the current subcommand is terminated.

System programmer response

Verify that the user has enough memory to perform ISPF functions. Also refer to the ISPF error log for additional diagnostic information.

User response

Enter the DB2I CANCEL command, and notify the system programmer.

DSNE247A ISPF RETURNED AN UNEXPECTED CODE WHILE UPDATING A ROW

Explanation

An ISPF TBPUT function returned with a condition code greater than four.

System action

TSO processing for the current subcommand is terminated.

System programmer response

Verify that the user has enough memory to perform ISPF functions. Recreate the user actions that lead to the failure. Also refer to the ISPF error log for additional diagnostic information.

User response

Enter the DB2I CANCEL command, and notify the system programmer.

DSNE248A COMMAND ENTERED CONTAINS INVALID CHARACTERS, RESPECIFY

Explanation

The command entered at the command line contains an invalid character, the command must be reentered.

System action

The TSO attachment facility is ready for more input.

User response

Correct the invalid command entry.

DSNE250A PLEASE ENTER THE COMMAND AT THE LINE WITH THE PLAN/ PACKAGE NAME

Explanation

SELECT or RESET commands must be entered on the line where the plan or package name is shown. This line contains the name of the plan or package, while the secondary lines do not.

System action

The line command is rejected. The TSO attachment facility is ready for more input.

User response

Reenter the line command on the primary plan or packagelines.

DSNE252A JCL WAS NOT CREATED, ERROR *errcode* WHILE DOING *function_name* FUNCTION

Explanation

Error code 'errcode' was received while doing a function 'function_name', the JCL was not created.

System action

Refer to *z/OS ISPF Dialog Developer's Guide* for the cause of this error.

User response

Contact your systems programmer.

Problem determination

Use the return code/function combination to find the causes for the problem in *z/OS ISPF Dialog Developer's Guide* and correct the problem.

Collect the following diagnostic items:

- Listing of the ISPF log for the session involved in the problem.

Severity

20

DSNE283A THE , (COMMA) OPTION IS INCOMPATIBLE WITH THE *hostlang* LANGUAGE

Explanation

The user tried to select the 'hostlang' APPLICATION LANGUAGE and the comma option of the DECIMAL POINT field on the DB2I defaults panel. This combination is not supported.

System action

The defaults panel is displayed again.

User response

Either change the APPLICATION LANGUAGE field or the DECIMAL POINT field. If you need the C (C/370 Compiler), then the DECIMAL POINT field must contain a decimal point (.).

DSNE288A YOU CANNOT SPECIFY (RUN)=YES WITH CICS OR IMS

Explanation

Application programs that make CICS or IMS calls cannot be run from the TSO environment. They can, however, be precompiled, bound, compiled, and linked under TSO. The user should specify N on the RUN panel when preparing a CICS or IMS application.

System action

The system is waiting for new input to the panel.

User response

Change the RUN option to N.

DSNE291A ALL DB2 COMMANDS BEGIN WITH A DASH

Explanation

The user omitted the Db2 command recognition character that must precede all Db2 commands.

System action

The Db2 commands panel is displayed again so the user can resubmit the command.

User response

Add the Db2 command recognition character, and reenter the command.

DSNE292I DATA SET *data-set-name* NOW CONTAINS YOUR JCL

Explanation

DB2I has just created some JCL for you. The JCL now resides in data set 'data-set-name'. You can now edit this data. The TSO SUBMIT command will start the job running in background.

System action

The system is waiting for your next request.

User response

You can start another DB2I job or leave the panel.

DSNE293A MEMBER NAME IS REQUIRED. YOUR PROGRAM MUST BE IN A PDS

Explanation

The user either has attempted to run a program that is not in a partitioned data set or has forgotten to specify a member name.

System action

The RUN panel will be displayed so that the user can specify a member name and try the run again.

User response

Specify a member name, and rerun the program.

DSNE294I SYSTEM RETCODE=*hex-code* USER OR DSN RETCODE=*decimal-code*

Explanation

A DB2I function has just completed. The return codes for that function are returned in this message. The variable 'hex-code' is a 3-digit hexadecimal number; the variable 'decimal-code' is a 3-digit decimal number. Refer to the appropriate MVS publication for explanations of the return codes.

System action

DB2I is ready for another execution cycle unless other messages appeared indicating that Db2 is unavailable.

User response

You may have to change input parameters to correct unsatisfactory completion codes.

DSNE295A YOU CANNOT DISPLAY AND RESTART A UTILITY AT THE SAME TIME

Explanation

You have set options on the DB2I Utilities panel that call for conflicting actions. You can either DISPLAY the status of a utility, or you can RESTART a utility, but you cannot do both.

System action

The system is waiting for new input to the panel.

User response

Either change the RESTART option to NO, or select a different FUNCTION.

DSNE296A YOU CANNOT TERMINATE AND RESTART A UTILITY AT THE SAME TIME

Explanation

You have set conflicting options on the DB2I Utilities panel. You can either TERMINATE a utility, or you can RESTART a utility, but you cannot do both.

System action

The system is waiting for new input to the panel.

User response

Either change the RESTART option to NO, or select a different FUNCTION.

DSNE297A ENTER DATA SET NAME: COPYDSN OR RCPYDSN1

Explanation

You have not specified a data set name for the COPY utility. A data set name for the local/current site (COPYDSN), and/or the recovery site (RCPYDSN1) is required.

System action

The system is waiting for new input to the panel.

User response

Enter a data set name for COPYDSN, and/or RCPYDSN1.

DSNE298A ERROR DURING EDIT: CLIST *data set name*

Explanation

Errors were encountered while attempting to change the online book data set names in the Db2 CLIST member DSNEMC01. No data set names were changed.

System action

The system is waiting for new input to the panel.

System programmer response

If you are unable to determine the problem, you can trace the Db2 CLIST execution while displaying this panel.

User response

Ensure that the CLIST data set name is correct and contains the DSNEMC01 CLIST member to be changed. This CLIST data set must also be available to the TSO user ID in WRITE mode. This error will continue to be displayed on the panel until the error is resolved or the user exits the panel (END).

Problem determination

Examine the CLIST trace output for any TSO/ISPF nonzero return codes encountered during CLIST execution.

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

DSNE340I INTERNAL ERROR - ILLEGAL TYPE IN MODULE *module-name*

Explanation

An internal Db2 problem has occurred. The named module has detected a nonexistent SQLTYPE.

System programmer response

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

User response

Collect the SPUFI trace and ISPF log, and notify either the system programmer or the database administrator.

You may have to rerun the failing job after you have turned on trace. This will enable you to send trace messages to the ISPF log.

DSNE345I WARNING: DB2 DATA CORRUPTION CAN RESULT FROM THIS SPUFI SESSION BECAUSE THE CCSID USED BY THE TERMINAL IS NOT THE SAME AS THE CCSID USED BY SPUFI. TERMINAL CCSID *terminal-ccsid*. SPUFI CCSID: *spufi-ccsid*. NOTIFY THE DB2 SYSTEM ADMINISTRATOR.

Explanation

The current SPUFI session was initiated on a TSO terminal that uses a coded character set identifier (CCSID) of *terminal-ccsid*. However, SPUFI was bound on the local Db2 server using a CCSID of *spufi-ccsid*. This discrepancy can lead to unexpected data conversion, affecting any characters that do not map to the same code point in the two CCSIDs.

If *terminal-ccsid* is blank, then the terminal code page and character set cannot be queried or they are not supported by ISPF. Possible reasons why the terminal

code page and character set cannot be queried include:

- Hardware limitation such as use of older terminals
- Improper configuration of the terminal emulator software
- Improper BTAM or control unit setup

A blank *spufi-ccsid* indicates that SPUFI might have received an unexpected SQLCODE when it attempted to query the current application encoding scheme. Diagnostics for that SQLCODE appear directly after the DSNE345I message in the message warning panel.

System action

SPUFI waits for the user to indicate whether to continue or quit.

System programmer response

On the local Db2, SPUFI expects to process only EBCDIC character data encoded in the CCSID of *spufi-ccsid*. Ensure that the user's TSO terminal configuration is updated to use a CCSID of *spufi-ccsid*. Verify the data integrity of all tables modified during the SPUFI session and follow standard recovery procedures. Contact IBM for guidance if widespread or long term data corruption is evident (for example, if many users report this message when using SPUFI).

Special considerations:

Blank CCSIDs

As noted previously, a blank *terminal-ccsid* setting occurs when the terminal code page and character set cannot be queried or they are not supported by ISPF. Check for the following situations:

- If the message occurs when using a terminal emulator, verify that the emulator software is configured with a CCSID setting.
- Check the VTAM® setup: The VTAM logmode entry used to define the session characteristics for the terminal must have the EDS (extended data stream) bit turned 'on' in the PSERVIC (that is, pservic=xx80xx..). For more information, consult *OS/390 ISPF Planning and Customization* and the *z/OS SNA Network Implementation Guide*.
- Older terminal hardware such as the IBM 327x series do not support the EDS, so a CCSID cannot be determined. You can instruct users of such devices to specify in the SPUFI defaults panel that the DSNE345I message should be suppressed. Note that suppression applies only when the terminal CCSID is blank. You cannot use this field to suppress DSNE345I when *terminal-ccsid* is non-blank.

A blank *spufi-ccsid* indicates that SPUFI probably received an unexpected SQLCODE when it attempted to query the current application encoding scheme. Check the diagnostics for the SQLCODE that is displayed directly after the DSNE345I message, and then respond to the diagnostics accordingly.

User response

Notify the system programmer. Depress the END key to quit or the ENTER key to continue. **Important:** Continuing can result in corruption of data stored by Db2.

Related tasks

Making SPUFI work with different terminal CCSIDs (Db2 Installation and Migration)

DSNE346I WARNING: ALL SHIFT-IN AND SHIFT-OUT CHARACTERS IN THE 'FOR BIT DATA' COLUMNS IN THE OUTPUT ABOVE HAVE BEEN REPLACED BY THE SUBSTITUTION CHARACTER '.'

Explanation

The current SQL query returned one or more columns that have a data type of CHAR FOR BIT DATA, VARCHAR FOR BIT DATA, or both. Also, the current SPUFI session indicates that a graphic character set is being used. To prevent the possible corruption of outputted data elsewhere in the report, all shift-in (code point x'0E') and shift-out (code point x'0F') characters will be replaced with a substitution character of '.' (code point x'4B').

System action

SPUFI processing continues.

User response

To avoid the substitution character for shift-in and shift-out data, and in order to see all FOR BIT DATA in hexadecimal format, go to the SPUFI defaults panel and change the setting of the FOR BIT DATA field from ASIS to HEX.

DSNE351A EDIT PROCESSING OPTION MUST BE Y (YES) OR N (NO)

Explanation

The user specified an edit option other than 'YES', 'NO', or the abbreviation 'Y' or 'N'. A valid user response determines whether SPUFI invokes the ISPF editor to allow the user to edit the input data set.

System action

SPUFI will wait until the user enters a valid response.

User response

Type in a 'Y' or an 'N', and press 'ENTER'.

DSNE352A EXECUTE PROCESSING OPTION MUST BE Y (YES) OR N (NO)

Explanation

The user specified an execute option other than 'YES', 'NO', or the abbreviation 'Y' or 'N'. A valid user response determines whether SPUFI executes the SQL statements in the user input data set.

System action

SPUFI waits until the user enters a valid response.

User response

Type in a 'Y' or an 'N', and press 'ENTER'.

DSNE353A BROWSE PROCESSING OPTION MUST BE Y (YES) OR N (NO)

Explanation

The user specified a browse option other than 'YES', 'NO', or the abbreviation 'Y' or 'N'. A valid user response determines whether SPUFI invokes ISPF BROWSE to allow the user to browse the output data set.

System action

SPUFI will wait until the user enters a valid response.

User response

Type in a 'Y' or an 'N', and press 'ENTER'.

DSNE354A AUTOCOMMIT PROCESSING OPTION MUST BE Y (YES) OR N (NO)

Explanation

The user specified an AUTOCOMMIT option other than 'YES', 'NO', or the abbreviation 'Y' or 'N'. A valid user response determines whether SPUFI automatically commits all the changes to the database subsystem. This was encountered as a result of executing the user's SQL statement(s). The commit is done at the end of the processing of an input data set, if it is requested and if there has been no SQL execution error.

System action

SPUFI waits until the user enters a valid response.

User response

Type in a 'Y' or an 'N', and press 'ENTER'.

DSNE355A CHANGE DEFAULTS PROCESSING OPTION MUST BE Y (YES) OR N (NO)

Explanation

The user specified a change-default option other than 'YES', 'NO', or the abbreviation 'Y' or 'N'. A valid user response determines whether SPUFI displays the current-session SPUFI defaults and allows the user to change the defaults.

System action

SPUFI waits until the user enters a valid response.

User response

Type in a 'Y' or an 'N', and press 'ENTER'.

DSNE359A OUTPUT DATA SET NAME REQUIRED FOR EXECUTE OR BROWSE

Explanation

The user did not specify the name of the output data set.

System action

SPUFI waits until the user specifies an output data set.

User response

Type in the correct entry, and press 'ENTER'.

DSNE360A THE OUTPUT DATA SET MUST RESIDE ON DASD

Explanation

The user has attempted to send the output of SPUFI to a SYSOUT data set. He must enter a generic device class that contains only DASD devices.

System action

SPUFI waits until the user specifies a valid output device class.

User response

Type in the correct entry, and press 'ENTER'.

DSNE361I SPUFI PROCESSING COMPLETE

Explanation

This informational message is displayed after SPUFI successfully created the output data set. If errors are encountered before the completion of output data set processing, or during the subsequent BROUSE OUTPUT option for this data set, this message is replaced by either SPUFI or TSO/ISPF error messages.

System action

The system waits for the next user input.

User response

At this point you can change the SPUFI panel variable settings to initiate a new SPUFI request, or you can exit SPUFI.

DSNE363A ONLY RR (REPEATABLE READ), CS (CURSOR STABILITY), OR UR (UNCOMMITTED READ) ALLOWED

Explanation

The user has entered an invalid isolation level. This value must be one of the following:

- RR
- CS

'Isolation level' here refers to the degree to which the SPUFI user wants to isolate SQL execution from the effects of other concurrently executing Db2 applications.

RR

If the repeatable read (RR) level is specified and the AUTOCOMMIT option is 'YES', other applications can modify the selected database values as soon as the SPUFI EXECUTE phase is completed and as soon as the automatic COMMIT (or ROLLBACK, if an error was encountered) operation is performed. Therefore, it is possible that the retrieved data being browsed by the user has already been modified by another application.

If the RR level is specified and the AUTOCOMMIT option is 'NO', then no other Db2 application executing concurrently can change any of the selected database values until the SPUFI user issues either a COMMIT or a ROLLBACK. Therefore, other applications might be in a normal wait state while the SPUFI user is browsing the output data set.

CS

If the cursor stability (CS) level is specified, it does not make any difference whether the AUTOCOMMIT option is 'YES' or 'NO'. Other concurrently executing Db2 applications can change the selected database values as soon as the SELECT has completed.

UR

If the uncommitted read (UR) level is specified, SPUFI queries can read data that has been changed, but has not yet been committed by another application. It does not make any difference whether the AUTOCOMMIT option is 'YES' or 'NO'. Other concurrently executing Db2 applications can change the selected database values without waiting for the SELECT to complete.

System action

SPUFI waits until the user specifies a valid isolation level.

User response

Type in the correct entry, and press 'ENTER'.

DSNE364A *token* IS INVALID AS AN SQL STATEMENT TERMINATOR

Explanation

The user has entered an SQL statement terminator (token) that is not supported. The following values are not valid for use as a SQL statement terminator:

- blank
- comma
- single and double quotes
- underscore
- left and right parenthesis

System action

The statement cannot be executed.

User response

Specify a valid SQL statement terminator.

DSNE365A SQL STATEMENT TERMINATOR HAS BEEN CHANGED TO *token*

Explanation

The SPUFI input data set contains a #SET statement that changes the SQL statement terminator to *token*.

System action

token is the SQL statement terminator until another #SET statement changes it or the end of the input data is reached.

DSNE366A ONLY THE LISTED RECFM TYPES ARE ALLOWED

Explanation

The user has entered an invalid record format for the output data set.

System action

The system waits until the user enters one of the allowed RECFM types.

User response

Enter a RECFM of V, VB, VBA, F, FB, or FBA.

DSNE367A ACTION MUST BE C (COMMIT) OR R (ROLLBACK) OR D (DEFER)

Explanation

This message requests the user to make a commit action decision.

User response

To commit all the changes made since the last commit point, enter a 'C'. To undo all the changes that have been made since the last commit point, enter an 'R'. To defer the decision, enter a blank.

DSNE368A YES OR NO MUST BE ENTERED FOR EACH PROCESSING OPTION

Explanation

One of the processing options was left blank or set to blank by the user.

User response

Enter 'YES' or 'NO' for each processing option.

DSNE370A INPUT DATA SET COULD NOT BE OPENED

Explanation

The input data set could not be opened because of invalid data set attributes. The logical record length (LRECL) of the input data set must be 80K. The record format (RECFM) must be either F or FB. The input data set may be either sequential or partitioned.

User response

Specify an input data set having valid attributes.

DSNE371A OUTPUT DATA SET COULD NOT BE OPENED

Explanation

The output data set could not be opened because of invalid data set attributes. The logical record length (LRECL) must be at least 80KB and less than 32KB. The record format (RECFM) must be F, FB, FBA, V, VB, or VBA. The output data set must be sequential.

User response

Either specify an output data set having valid attributes, or enter correct attributes for this data set.

DSNE372A OUTPUT DATA SET MUST BE SEQUENTIAL

Explanation

The user has requested that a nonsequential output data set contain the output from execution of SQL statements.

User response

Enter the data-set-name of a sequential data set for the output data set.

DSNE374A OUTPUT DATA SET MUST BE SEQUENTIAL

Explanation

The output data set is of unrecognized organization. It must be sequential.

System action

Processing does not begin until the panel entries are correct and the user presses 'ENTER'.

User response

The output data set must be sequential. Enter a sequential data-set-name (no member) in the output data set field.

DSNE375A ACCESS TO INPUT DATA SET NOT AUTHORIZED

Explanation

A local installation-supplied exit has rejected access to the input data set specified by the user.

User response

Either specify the name of a data set for which authorization will be allowed, or arrange to authorize the original data-set-name. Resubmit the request.

DSNE376A ACCESS TO OUTPUT DATA SET NOT AUTHORIZED

Explanation

A local installation-supplied exit has rejected access to the output data set.

User response

Either specify the name of a data set for which authorization will be allowed, or arrange to authorize the original data-set-name. Resubmit the request.

DSNE377A INPUT DATA SET RECFM MUST BE F OR FB WITH LRECL 79 OR 80

Explanation

The user specified an input data set that does not have the required attributes (F or FB with LRECL 79 or 80).

Note: If the input data set has an LRECL of 79, SPUFI assumes the data set was exported by QMF. Therefore, it is recommended that you should not use an LRECL of 79 for a data set that is not exported from QMF.

User response

Correct the input data set attributes, and try again.

DSNE378A ASA CONTROL CHARACTER NOT ALLOWED ON INPUT DATA SET RECFM

Explanation

The user attempted to use an input data set containing forms control characters or machine control characters. These characters are not allowed on the input data set.

User response

Remove the forms control characters or machine control characters from the input data set, and try again.

DSNE379A text from DYNALLOC

Explanation

An attempt to allocate a data set has failed. This message contains the secondary explanation for the failure.

User response

Correct the condition, and resubmit the subcommand.

DSNE381A UNEXPECTED ALLOCATION RETURN CODE *return-code*, *reason-code*

Explanation

An unexpected return code from the z/OS DYNALLOC (SVC 99) service was received.

return-code
The DYNALLOC return code.

reason-code
The reason code that is associated with the return code.

User response

See the DYNALLOC reason and return codes to determine how to correct the condition. Then resubmit the subcommand.

Related reference
Interpreting DYNALLOC return codes (MVS Programming Authorized Assembler Services Reference)

DSNE383A INVALID OUTPUT DATA SET RECORD FORMAT. OPEN RETURN CODE rcode

Explanation

The data set format was invalid. Acceptable record formats are: F, FB, FBA, V, VB, or VBA.

User response

Enter a valid value in the record format field.

DSNE384A UNEXPECTED DEALLOCATION RETURN CODE return-code, reason-code

Explanation

A deallocation request has returned an unexpected return and reason code.

User response

Refer to the appropriate MVS publication for explanations of the return and reason codes.

DSNE385A ENTER MEMBER NAME. INPUT DATA SET IS PARTITIONED

Explanation

The input data set is partitioned, and the user did not enter the member name on the SPUFI main menu.

System action

Processing does not begin until the panel entries are correct. If any of the processing options are changed, this message is ignored, and processing will proceed according to the new settings.

User response

Enter the member name.

DSNE386A MEMBER member-name NOT PRESENT IN SPECIFIED INPUT DATA SET

Explanation

The named member is not in the input data set.

System action

Processing does not begin until the panel entries are correct.

User response

Enter a correct member name or a correct data-set-name.

DSNE387I DSNTIAR ERROR. RETURN CODE = *return-code*

Explanation

An internal Db2 error has occurred. DSNTIAR attempted to format a message to explain a nonzero SQL code, but the attempt failed.

System programmer response

Print the ISPF log, and collect a dump of the TSO address space.

User response

Notify the system programmer.

Related tasks

Displaying SQLCA fields by calling DSNTIAR (Db2 Application programming and SQL)

Related reference

Possible return codes from DSNTIAR (Db2 Application programming and SQL)

DSNE388A INPUT DATA SET MUST BE SEQUENTIAL OR PARTITIONED

Explanation

The input data set organization is not recognized.

System action

Processing does not begin until the panel entries are correct.

User response

Enter a data-set-name with sequential or partitioned organization. It may be necessary to allocate a sequential or partitioned data set.

DSNE389A A MEMBER HAS BEEN SPECIFIED FOR A SEQUENTIAL DATA SET

Explanation

The user has specified a member as input to SPUFI. However, the input data set specified is sequential.

System action

Processing does not begin until the panel entries are correct.

User response

Enter the data-set-name without attempting to specify a member.

DSNE390A THE OUTPUT DATA SET ATTRIBUTES ARE INCONSISTENT

Explanation

This message indicates that the user made one of three possible errors in specifying block size and logical record length (LRECL):

- The user specified a record format (RECFM) of F, but the block size is not equal to the logical record length (LRECL)
- The user specified a record format (RECFM) of F, FB, or FBA, but block size is not evenly divisible by logical record length (LRECL).
- The user specified a record format (RECFM) of VB, but the block size is less than logical record length (LRECL) + 4. The user must allow 4 bytes for the block header.

User response

Specify logical record length (LRECL) and block size appropriately on the DSNESP02 panel.

DSNE391I FREEMAIN ERROR IN MODULE module-name

Explanation

SPUFI encountered a FREEMAIN error in the specified module.

System action

This message is logged in the ISPF log data set. No abend occurs.

System programmer response

Print the ISPF log, and collect a dump of the TSO address space. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

User response

Notify the system programmer or system administrator.

DSNE392I GETMAIN ERROR IN MODULE module-name

Explanation

SPUFI encountered a GETMAIN error in the specified module.

System action

This message is logged in the ISPF log data set. User abend X'00C50003' is issued.

System programmer response

Ensure that enough storage is allocated to the TSO user.

User response

Notify the system programmer or system administrator.

DSNE393I SPF VDELETE ERROR IN MODULE DSNESM90. ERROR CODE = flag

Explanation

An internal SPUFI error has occurred. CSECT DSNESM90 tried to delete an ISPF dialog variable that was not previously defined.

System action

This message is logged in the ISPF log data set. No abend is issued. However, if the problem persists, notify the system programmer.

System programmer response

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Problem determination

Record the error code 'flag'. It has no user significance, but it can assist IBM Support in resolving the problem.

DSNE395I UNEXPECTED RETURN CODE FROM SPF SERVICE

Explanation

A return code of 4 from ISPF DISPLAY or a return code of 8 from the ISPF editor was encountered.

System action

The message is displayed on the SPUFI panel and logged in the ISPF log data set. No user abend is issued.

System programmer response

If a new release of ISPF is used, determine whether the above return codes are now assigned meaning by ISPF.

User response

Notify the system programmer.

Problem determination

This message may be issued if a previously unassigned (by ISPF) return code from the ISPF DISPLAY or EDIT function is encountered. If a new release of ISPF is used, determine whether the above return codes are now assigned meaning by ISPF.

DSNE396A YOU CANNOT SPECIFY DEFER WHEN LEAVING SPUFI

Explanation

You have attempted to leave SPUFI with outstanding database changes not yet committed or rolled back. You can’t leave SPUFI unless a decision has been made to commit or rollback.

System action

The system is waiting for new input to the panel.

User response

Specify COMMIT or ROLLBACK.

DSNE601I SQL STATEMENTS ASSUMED TO BE BETWEEN COLUMNS nn AND nn

Explanation

This message indicates which record columns in the input data set are scanned for SQL statements. For data sets of type COBOL, columns 8 through 72 are scanned. For STANDARD data set types, if the LRECL is 79 then columns 1 through 71 are scanned, and if the LRECL is 80 then columns 1 through 72 are scanned.

System action

This message is written to the SPUFI output data set along with other summary messages.

DSNE603E INPUT STATEMENT HAS UNBALANCED APOSTROPHES

Explanation

An opening apostrophe was detected in an input record, but the end of data set was reached before a closing apostrophe was encountered.

System action

SPUFI processing stops. Correct the error, and start again.

User response

A closing apostrophe was probably omitted from a literal value. Add the missing apostrophe, and execute the input file again.

DSNE604E THE SQL STATEMENT EXCEEDS THE MAXIMUM ALLOWED LENGTH

Explanation

This message indicates that the preceding SQL statement in the output data set exceeds the maximum length allowed. An SQL statement may span up to a maximum of 29127 input records.

System action

SPUFI processing stops. Correct the error, and start again.

User response

Edit the SQL statement in question so that it resides on fewer input records.

DSNE605E THE INPUT DATA SET IS EMPTY

Explanation

The user has specified an input data set that does not contain any valid SQL statements.

System action

SPUFI processing stops. Correct the error, and start again.

User response

Edit SQL statements into the specified data set, or specify another input data set that contains valid SQL statements.

DSNE606E INVALID USE OF AN SQL STATEMENT TERMINATOR

Explanation

An SQL statement terminator has been used improperly in an SQL input statement. Either two successive statement terminators were encountered, or a series of blanks followed by a terminator was detected. The proper use of the SQL statement terminator is to delimit the end of a valid SQL statement.

System action

SPUFI processing stops. Correct the error, and start again.

User response

Remove the extraneous terminator from the input data set.

DSNE607E PREVIOUS INPUT RECORD HAS UNBALANCED SO/SI CHARACTERS

Explanation

A shift out (SO) character was detected in the previous input record with no corresponding shift in (SI) character in the record. The SO/SI characters delimit a DBCS string in the SPUFI input data set. SPUFI requires that SO/SI characters be paired within an input record.

System action

SPUFI processing stops.

User response

A closing SI character was probably omitted from a literal value. Add the missing SI character, and re-execute the input file.

DSNE609E INPUT STATEMENT HAS UNBALANCED QUOTES

Explanation

An opening quote (“) was detected in an input record, but a corresponding quote was not found at the end. Two sets of quotes are used to delimit a statement.

System action

SPUFI processing stops.

User response

A closing quote was probably omitted from a literal value. Add the missing quote, and execute the input file again.

DSNE610I NUMBER OF ROWS DISPLAYED IS nn

Explanation

Execution of an SQL SELECT statement causes one or more rows of data to be displayed. This message appears in the output data set following the returned data for a SELECT. It gives a count, 'nn', of the number of rows displayed.

System action

Input data set processing is completed, and this message is included in the SPUFI output.

DSNE611I COLUMN HEADER *name* FOR COLUMN NUMBER *nn* WAS TRUNCATED

Explanation

An SQL SELECT statement was executed, but the specified column name, identified by 'nn' in the message, was truncated. This truncation occurred either because the column name was longer than the remaining record width or because the name was longer than the user-specified maximum field length.

System action

Input data set processing is completed, and this message is included in the SPUFI output.

User response

If the truncation is caused by insufficient record width, use a larger LRECL for the output data set or specify fewer data columns to be returned on the SELECT statement.

If the truncation is caused by the user-specified maximum field length setting, use a larger value for this setting.

DSNE612I DATA FOR COLUMN HEADER name COLUMN NUMBER nn WAS TRUNCATED

Explanation

An SQL SELECT statement was executed, but data for the specified column name, identified by 'nn' in the message, was truncated. This truncation occurred either because the data was longer than the remaining record width or because the data was longer than the user-specified maximum field length.

System action

Input data set processing is completed, and this message is included in the SPUFI output.

User response

If the truncation is because of insufficient record width, use a larger LRECL for the output data set or specify fewer data columns be returned on the SELECT statement.

If the truncation is because of the user-specified maximum field length setting, use a larger value for this setting.

DSNE613I OUTPUT LRECL IS TOO SMALL TO DISPLAY THE FOLLOWING COLUMNS:

Explanation

An SQL SELECT statement was executed, but the logical record length of the output data set was not large enough to display the column names and data values of all returned columns. The columns specified following this message were not displayed because of insufficient remaining record width.

System action

Input data set processing is completed, and this message is included in the SPUFI output.

User response

This condition can be avoided by using a larger LRECL for the output data set or by specifying that fewer data columns be returned on the SELECT statement.

DSNE614I AUTOCOMMIT IS NO, NO CHANGES COMMITTED

Explanation

The user delayed committing or rolling back changes made during execution of the input file until later in the session. This is done by specifying an AUTOCOMMIT option of 'NO'.

System action

Input data set processing is completed, and this message is included in the SPUFI output.

User response

Commit or roll back these changes before ending the session.

DSNE615I NUMBER OF ROWS AFFECTED IS *nn*

Explanation

This message is written to the output data set following execution of an SQL data change statement, or REFRESH statement. *nn* is a count of the number of rows that qualified to be deleted, inserted, or updated by that statement, excluding rows affected by either triggers or referential integrity constraints. If the previous SQL statement is a multiple-row FETCH, *nn* indicates the number of rows fetched. If an integer arithmetic overflow occurs during the calculation of the number of affected rows, *nn* is -1.

Note: In the case of a mass delete of a table in a segmented table space, or a delete from a view when neither the DELETE statement nor the definition of the view included selection criteria, this message will not be displayed. In these cases, Db2 does not access nor count the individual rows.

System action

Input data set processing is completed, and this message is included in the SPUFI output.

DSNE616I STATEMENT EXECUTION WAS SUCCESSFUL, SQLCODE IS *sql-code*

Explanation

This message is written to the output data set following the successful execution of an SQL statement from the input data set. The *sql-code* value specifies the SQL return code for the statement.

System action

Input data set processing is completed, and this message is included in the SPUFI output.

Related concepts

SQL codes (Db2 Codes)

DSNE617I COMMIT PERFORMED, SQLCODE IS *sql-code*

Explanation

When an input file is executed successfully and the user specified an AUTOCOMMIT option of 'YES', this message is written to the output data set to indicate the status of the COMMIT that was performed. The *sql-code* value specifies the SQL return code for the COMMIT.

System action

Input data set processing is completed, and this message is included in the SPUFI output.

Related concepts

SQL codes (Db2 Codes)

DSNE618I ROLLBACK PERFORMED, SQLCODE IS *sql-code*

Explanation

When an error is encountered while executing a SPUFI input file, and the user specified an AUTOCOMMIT option of 'YES', this message will be written to the output data set to indicate the status of the ROLLBACK that was performed. *sql-code* specifies the SQL return code for the statement.

System action

Input data set processing is completed, and this message is included in the SPUFI output.

Related concepts

SQL codes (Db2 Codes)

DSNE620I NUMBER OF SQL STATEMENTS PROCESSED IS nn

Explanation

This message is written to the output data set after processing all SQL statements in the current input data set. The term 'nn' is a count of the number of SQL statements processed.

System action

Input data set processing is completed, and this message is included in the SPUFI output.

DSNE621I NUMBER OF INPUT RECORDS READ IS nn

Explanation

This message is written to the output data set after processing all SQL statements in the current input data set. The term 'nn' is a count of the total number of records read from the input data set.

System action

Input data set processing is completed, and this message is included in the SPUFI output.

DSNE622I NUMBER OF OUTPUT RECORDS WRITTEN IS nn

Explanation

This message is written to the output data set after processing all SQL statements in the current input data set. The term 'nn' is a count of the total number of records written to the output data set.

System action

Input data set processing is completed, and this message is included in the SPUFI output.

DSNE623I SYNTAX ERROR AT RECORD xx, OFFSET xx

Explanation

A syntax error was detected in the SQL statement preceding this message in the output data set. 'xx' identifies the erroneous line number in the SQL statement, and 'yy' identifies the offset (in characters) of the error within that record.

System action

Input data set processing is completed, and this message is included in the SPUFI output.

User response

Correct the specified syntax error in the input data set, and execute the job again.

DSNE624I UNABLE TO LOAD ISPLINK MODULE. SPUFI PROCESSING TERMINATED

Explanation

During SPUFI initialization processing, an error was encountered attempting to LOAD the ISPF interface module, ISPLINK. This module could not be located in the LNKLST or STEPLIB library concatenation.

System action

SPUFI processing is terminated.

User response

Rearrange your library concatenation so that the ISPLINK module can be located. This module resides in the ISPF load library.

DSNE625I CONNECT TO LOCATION (*location-name*) PERFORMED, SQLCODE IS *sql-code*

Explanation

The SPUFI user has indicated that the SQL statements defined in the input file are to be processed by the server at the remote location specified in the CONNECT LOCATION field of the SPUFI panel.

This message appears in the output file and indicates that an SQL CONNECT request was issued by SPUFI to the specified location name. The *sql-code* value specifies the SQL return code associated with the CONNECT request.

System action

Subsequent processing of the SQL statements in the input file is based upon the successful completion of the CONNECT request. If the request is unsuccessful, the SQL error number and all associated error messages are placed in the output file.

User response

Respond as indicated by the SQL code returned.

Related concepts

SQL codes (Db2 Codes)

DSNE626I MAXIMUM OUTPUT LINES FOR SELECT STATEMENT REACHED (number), PROCESSING FOR

CURRENT SELECT STATEMENT TERMINATED

Explanation

The maximum number of output lines to be displayed for a SELECT statement was reached. Processing of the current SELECT statement is terminated. The maximum number to display is specified by the SPUFI user on the CURRENT SPUFI DEFAULTS panel.

This message appears in the SPUFI output file.

System action

Processing of subsequent SQL statements in the input file continues.

User response

If the number of lines displayed is insufficient, you can increase the maximum number of lines to be displayed for SELECT statements on the CURRENT SPUFI DEFAULTS panel and re-execute the SELECT statement.

Related information

+495 (Db2 Codes)

DSNE627I ***csect-id*** **FOR SQLCODE =** ***sql-code*****, USER REQUESTED:** ***action***

Explanation

During PREPARE processing of the SQL statement, SPUFI received an SQLCODE (+495) and requested you to respond with the action to be taken by SPUFI (CONTINUE or BYPASS).

SPUFI does not consider this to be an SQL statement error and places this message in the SPUFI output file to document the SQLCODE received and the action you requested. *sql-code* specifies the SQL return code associated with the PREPARE request.

System action

SPUFI processing for this statement is based on *action* documented in the message:

- CONTINUE
  - Processing for the current SQL statement continues normally.
- BYPASS
  - Processing for the current SQL statement is terminated without error.

User response

Respond as indicated by the SQL code returned.

Related concepts

SQL codes (Db2 Codes)

DSNE800A **NO DEFAULT VALUES WERE CHANGED. PRESS ENTER TO CONTINUE**

Explanation

The user left panel DSNESP02 without changing it. This panel contains all the defaults that can be modified by the user.

System action

This message is presented on the SPUFI panel DSNESP01. SPUFI waits for the next user input.

User response

Press 'ENTER' if you want to continue.

DSNE803A **INPUT FILE WAS NOT CHANGED. PRESS ENTER TO CONTINUE**

Explanation

The user has exited from the ISPF editor without modifying the input data set.

System action

The system waits for the next user input.

User response

Press 'ENTER' if you want to continue. The SPUFI panel variable settings can be changed at this point.

DSNE804A **TO CONTINUE, C (COMMIT) OR R (ROLLBACK) MUST BE SPECIFIED**

Explanation

The user has specified the AUTOCOMMIT=NO option and now wants either to exit or to switch to another Db2 subsystem with outstanding work uncommitted on the current Db2 subsystem.

System action

Db2 waits for the user to specify either the COMMIT (C) or the ROLLBACK (R) option.

User response

Enter 'C' or 'R' to continue.

DSNE808A **EDIT SESSION HAS COMPLETED. PRESS ENTER TO CONTINUE.**

Explanation

The user has exited from the ISPF editor.

System action

SPUFI waits form the next user input.

User response

Press 'Enter' if you want to continue. Press 'END' if you want to terminate your SPUFI session. The SPUFI panel variable settings can be changed at this point.

DSNE901I EXECUTION COMPLETE

Explanation

Execution of a subcommand has successfully completed.

System action

The TSO attachment facility is ready for more input.

DSNE903I WARNING, DECLARATION HAS SAME NAME AS TABLE table-name

Explanation

A DCLGEN subcommand has a 'STRUCTURE' parameter that is the same as the 'table name' specified in the message. The requested declaration has been created, but this could cause conflicts with internal names.

System action

DCLGEN execution continues.

User response

Choose a different 'STRUCTURE' parameter.

DSNE904I EXECUTION COMPLETE, MEMBER member-name REPLACED

Explanation

A DCLGEN subcommand executed successfully, replacing the 'member-name' specified in the message.

System action

The TSO attachment facility is ready for more input.

DSNE905I EXECUTION COMPLETE, MEMBER member-name ADDED

Explanation

A DCLGEN subcommand executed successfully, adding the 'member-name' specified in the message to the data set specified in the DCLGEN subcommand.

System action

The TSO attachment facility is ready for more input.

DSNE908E *csect-name* INVALID USE OF *parameter* IN PARAMETER LIST OF KEYWORD *keyword*.

Explanation

An invalid parameter was specified in the parameter list of the specified keyword.

System action

Subcommand processing is terminated. The TSO attachment facility is ready for more input.

User response

Correct the parameter list in error, and resubmit the job.

Severity

8

DSNE909E *csectname* WARNING, DBCSSYMBOL KEYWORD IS INVALID WITH LANGUAGE *language* KEYWORD IGNORED

Explanation

You specified the DBCSSYMBOL keyword in your DCLGEN invocation, but your LANGUAGE keyword value was not COB2. DBCSSYMBOL only applies to COB2 PICTURE clauses. DCLGEN will ignore this keyword.

System action

DCLGEN processing continues.

User response

In the future, do not specify the DBCSSYMBOL keyword unless the LANGUAGE keyword value is COB2.

DSNE910E *csectname* WARNING, THE OWNER KEYWORD WAS SPECIFIED WITH A QUALIFIED TABLE NAME. OWNER KEYWORD IGNORED

Explanation

You specified both the OWNER keyword and a qualified table name for the TABLE keyword in your DCLGEN invocation. The table qualifier will be used as the table owner, and the OWNER keyword will be ignored.

System action

DCLGEN processing continues.

User response

In the future, specify either a qualified table name for the TABLE keyword, or an unqualified table name for the TABLE keyword along with the OWNER keyword.

DSNE920E **member-name ALREADY EXISTS, SPECIFY ACTION(REPLACE) TO REPLACE**

Explanation

The DCLGEN user tried to overwrite an old declaration with a new one without specifying REPLACE on the 'ACTION' parameter.

System action

The TSO attachment facility is ready for more input.

User response

Change the 'ACTION' parameter to REPLACE (if that's actually what you want to do), and resubmit the command.

DSNE921E **REQUIRED PARAMETER table-parameter IS MISSING**

Explanation

Your DCLGEN subcommand was missing the required TABLE parameter.

System action

Your DCLGEN subcommand was not processed. The DSN command processor issued a return code of 8. DSN is ready for more input.

User response

Resubmit the DCLGEN subcommand with a TABLE parameter.

DSNE922E **TABLE NAME QUALIFIER OF qualifier IS TOO LONG. CANNOT EXCEED 8 CHARACTERS IN LENGTH**

Explanation

DCLGEN detected an invalid TABLE parameter. The table name qualifier (the left portion of the table name) was too long.

System action

Your DCLGEN subcommand was not processed. The DSN command processor issued a return code of 8. DSN is ready for more input.

User response

Resubmit the DCLGEN subcommand with a shorter table name qualifier.

DSNE923E **CSECT *csect-name* FOUND AN UNRECOGNIZED LANGUAGE *unknown***

Explanation

This is a DCLGEN subsystem error, not a user error. The language parameter *unknown* is not known to the subsystem.

System action

The TSO attachment facility is ready for more input.

System programmer response

Re-create the problem with DSN tracing turned on. Collect the trace stream in the DSNTRACE data set. Use the ABEND subcommand of the DSN command processor to collect a dump. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

User response

Report the problem to the system programmer.

DSNE924E **PARSE FAILED IN CSECT *csect-name* PARAMETER parm, FLAG *flag***

Explanation

This is a Db2 subsystem error, not a user error. The 'PARM' parameter was not correctly parsed. The flag specified was detected as an inappropriate value in a parse results field.

System action

The TSO attachment facility is ready for more input.

System programmer response

Re-create the problem with DSN tracing turned on. Collect the trace stream in the DSNTRACE data set. Use the ABEND subcommand of the DSN command processor to collect a dump. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

User response

Report the problem to the system programmer.

DSNE925E BUFFER OVERFLOW IN CSECT csect-name WHILE WRITING string

Explanation

This is a DCLGEN subsystem error. CSECT 'csect-name' detected a buffer overflow condition while attempting to write 'string'.

System action

The TSO attachment facility is ready for more input.

System programmer response

Re-create the problem with DSN tracing turned on. Collect the trace stream in the DSNTRACE data set. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

User response

Notify the system programmer.

DSNE926E COMMAND REJECTED - *command* NOT SUPPORTED UNDER *command_processor*

Explanation

The user entered a TSO TIME or TEST command. These are not supported by DSN or DB2I.

System action

The user should leave DSN or DB2I, return to TSO, and retry the command. DSN can be run under TSO TEST. The TSO attachment facility is ready for more input.

User response

Enter the DSN subcommand, or leave DSN to execute the requested command.

DSNE927E RUN SUBCOMMANDS REQUIRE (1)PROGRAM PARM OR (2)PLAN AND CP PARMS

Explanation

RUN subcommands may contain (1) the 'PROGRAM' parameter and, optionally, the 'PLAN' parameter or (2) the 'PLAN' and command processor ('CP') parameters. Combinations of (1) and (2) are not allowed.

System action

The TSO attachment facility is ready for more input.

User response

Correct the subcommand, and resubmit the job.

DSNE928E RUN SUBCOMMANDS CANNOT HAVE A PROGRAM PARM AND A CP PARM

Explanation

A RUN subcommand cannot contain both the 'PROGRAM' and command processor ('CP') parameters. The subcommand should be resubmitted with only one of the parameters.

System action

The TSO attachment facility is ready for more input.

User response

Correct the subcommand, and resubmit the job.

DSNE929E TABLE NAME LOCATION OF (location-name) IS TOO LONG. CANNOT EXCEED 16 CHARACTERS IN LENGTH.

Explanation

DCLGEN detected an invalid AT(location) keyword parameter. The specified location name is too long.

System action

Your DCLGEN subcommand was not processed. The DSN command processor issues a return code of 8. The DSN is ready for more input.

User response

Resubmit the DCLGEN subcommand specifying a location name that does not exceed 16 characters.

DSNE930E TABLE NAME OF table-name MUST BE QUALIFIED WHEN SPECIFIED

WITH LOCATION OF location-name

Explanation

DCLGEN detected an invalid TABLE keyword parameter. You must specify a qualified table name with the AT (location) keyword.

System action

Your DCLGEN subcommand was not processed. The DSN command processor issues a return code of 8. DSN is ready for more input.

User response

Specify a qualified table name and resubmit the DCLGEN command.

DSNE931E ***csect-name keyword-name (parameter_value)*** **CONTAINS AN INVALID SYMBOL (symbol)**

Explanation

An invalid 'symbol' (symbol) was specified in the 'parameter_value' associated with the specified 'keyword-name'.

System action

Subcommand processing is terminated. The TSO attachment facility is ready for more input.

User response

Correct the keyword 'parameter_value' in error, and resubmit the job.

Severity

8

DSNE932I **WARNING, ONLY IBM SUPPLIED names SHOULD BEGIN WITH DSN**

Explanation

The user has issued a BIND, REBIND, or FREE subcommand, using a name or id that begins with DSN.

System action

Processing continues.

User response

In the future, do not use plan-names, collection-ids, package -ids, or service-names that begin with DSN. It would be a good idea to FREE the plan, package, or service you just created and to BIND again with a new plan-name, collection-id, package-id, or service-name.

DSNE935I **... IS THE DCLGEN COMMAND THAT MADE THE FOLLOWING STATEMENTS**

Explanation

This message is a part of normal DCLGEN output. It identifies the DCLGEN command that produced the declaration of which it is a part.

System action

This message is included in the DCLGEN output.

DSNE936I **THE NUMBER OF COLUMNS DESCRIBED BY THIS DECLARATION IS nnn**

Explanation

This message is a part of normal DCLGEN output. It tells how many columns were in the table that was named in the DCLGEN command.

System action

This message is included in the DCLGEN output.

DSNE937I **COBOL DECLARATION FOR TABLE table-name**

Explanation

This message is a part of normal DCLGEN output. It tells the name of the table for which the declaration was created.

System action

This message is included in the DCLGEN output.

DSNE938I **PLI DECLARATION FOR TABLE table-name**

Explanation

This message is a part of normal DCLGEN output. It tells the name of the table for which the declaration was created.

System action

This message is included in the DCLGEN output.

DSNE939E ***csect-name*** **THE COMBINATION ACQUIRE(ALLOCATE) AND RELEASE(COMMIT) IS NOT ALLOWED**

Explanation

The BIND or REBIND subcommand was submitted with conflicting parameters.You cannot specify ACQUIRE(ALLOCATE) and RELEASE(COMMIT) on the same subcommand.

System action

The subcommand is terminated and the DSN command processor reissues theDSN prompt to allow another subcommand to be entered.

User response

Enter the corrected subcommand.

Related tasks

Choosing a RELEASE option (Db2 Performance)

Related reference

BIND PACKAGE (DSN) (Db2 Commands)
BIND PLAN (DSN) (Db2 Commands)
REBIND PACKAGE (DSN) (Db2 Commands)
REBIND PLAN (DSN) (Db2 Commands)
ACQUIRE bind option (Db2 Commands)
RELEASE bind option (Db2 Commands)

DSNE940E DEFER(PREPARE) INVALID WITH NODEFER(PREPARE)

Explanation

The BIND or REBIND subcommand was submitted with conflicting parameters. You cannot specify DEFER(PREPARE) and NODEFER(PREPARE) on the same subcommand because these actions conflict.

System action

The subcommand is terminated and the DSN command processor reissues the DSN prompt to allow another subcommand to be entered.

User response

Enter the corrected subcommand.

Related reference

BIND PACKAGE (DSN) (Db2 Commands)
BIND PLAN (DSN) (Db2 Commands)
REBIND PACKAGE (DSN) (Db2 Commands)
REBIND PLAN (DSN) (Db2 Commands)
DEFER and NODEFER bind options (Db2 Commands)

DSNE941I DSNBIND IS A RESERVED PLAN NAME

Explanation

This message is generated when the plan name is 'DSNBIND' in a BIND statement.

System action

Subcommand processing is terminated. The TSO attachment facility is ready for more input.

User response

Change the plan-name and resubmit the job.

DSNE942E *csect-name* REMOTE CONNECTION NAME *(parameter-value)* HAS INVALID FORMAT

Explanation

The REMOTE connection name *(parameter-value)* contains a < or> character in the starting or ending position of the parameter, but the parameter value is not bracketed by both characters. This message is also generated if the first character of the connection name is not an alphabetic character.

If the LU name format of the REMOTE keyword is to be used, the name must be specified as <*LU-name*>.

System action

Subcommand processing is terminated. DSN command processor reissues the DSN prompt to allow another subcommand to be entered.

User response

Correct the keyword *(parameter-value)* in error, and resubmit the job.

Severity

8

Related reference

DSNH (TSO CLIST) (Db2 Commands)

DSNE943E *csect-name* REMOTE CONNECTION NAME *(parameter_value)* CANNOT EXCEED *(length_value)* CHARACTERS IN LENGTH

Explanation

The REMOTE connection name *(parameter_value)* specified is greater than the length *(length_value)* permitted for the REMOTE keyword.

This message is issued if the REMOTE location name format exceeds 16 characters, or the LU name format (<LU name>) exceeds 10 characters in length.

System action

Subcommand processing is terminated. DSN command processor reissues the DSN prompt to allow another subcommand to be entered.

User response

Correct the keyword *(parameter_value)* in error and resubmit the job.

Severity

8

Related reference

DSNH (TSO CLIST) (Db2 Commands)

DSNE944I WARNING, BECAUSE YOUR TABLE OR COLUMN NAMES CONTAIN LOWER CASE OR NON-ALPHABETIC CHARACTERS, YOU WILL NEED TO USE THE SQL (NOT PL/I) INCLUDE STATEMENT TO INCLUDE DCLGEN OUTPUT INTO YOUR PROGRAM

Explanation

DCLGEN had to wrap your table or column name(s) in quotes so Db2 could process them. Quotes are not recognized by the PL/I compiler. To avoid compilation errors, use the SQL INCLUDE statement ('EXEC SQL INCLUDE *member-name*') to merge the DCLGEN output with your source program.

System action

DCLGEN processing continues.

User response

If you have not coded the SQL INCLUDE, do so before the next compile.

Related reference

DCLGEN (DECLARATIONS GENERATOR) (DSN) (Db2 Commands)

INCLUDE (Db2 SQL)

DSNE947I QUOTE PARAMETER IS ONLY VALID WITH COBOL. IT HAS BEEN CHANGED TO APOST

Explanation

You specified the DCLGEN QUOTE parameter and a non-COBOL language parameter. This combination is not valid. The QUOTE parameter was specified as either a parameter on the DCLGEN subcommand or a default set for your site at Db2 installation time.

The DCLGEN processor changed the QUOTE setting (for this run) to APOST.

System action

DCLGEN processing continues and should produce valid output.

User response

If you used QUOTE on the DCLGEN command, you may want to change it to APOST before submitting it again.

DSNE948I *csect-id* FURTHER *subcommand* PROCESSING WILL NOT BE ATTEMPTED

Explanation

A DSN command processor subcommand (indicated in the message) has encountered an error which stopped DSN from processing this subcommand. The subcommand will not complete normally. This message is accompanied by other messages explaining the exact nature of the problem.

System action

Subcommand processing terminates. The DSN prompt is reissued, indicating DSN is ready for another subcommand.

User response

Read the accompanying messages for help in deciding what to do next.

DSNE949E COMMIT PROCESSING ABNORMAL TERMINATION, REASON CODE reason_code

Explanation

The DSN command processor has initiated a 'prepare to commit' request in Db2. The request is rejected when Db2 cannot commit the work performed

System action

Commit processing is terminated.

User response

Examine the reason code associated with this message, and respond as indicated before resubmitting the job.

Problem determination

Reference the associated reason code to determine why the 'prepare to commit' was not successful.

DSNE950E DCLGEN DOES NOT SUPPORT THE lang LANGUAGE

Explanation

A DCLGEN user attempted to specify a LANGUAGE parameter, 'lang', that DCLGEN does not support.

System action

DCLGEN processing terminates.

User response

Correct the LANGUAGE parameter and resubmit the DCLGEN subcommand.

DSNE952I C DECLARATION FOR TABLE table-name

Explanation

This message is a part of normal DCLGEN output. It tells the name of the table for which the declaration was created.

System action

This message is included in the DCLGEN output.

DSNE953I *csect-name* PRECISION OF DECIMAL COLUMN *colname* EXCEEDS THE MAXIMUM PRECISION FOR THE *lang* LANGUAGE.

Explanation

DCLGEN was building a COBOL or PL/I language declaration for a table when it encountered a decimal column with a precision greater than the precision supported by the language.

System action

DCLGEN set the return code to 4 and processed the rest of the table.

User response

This is a warning. Be aware that the declaration for column 'colname' causes a compiler error. You must edit the declaration before including it in an application program.

DSNE954I *csect-name* USE OF THE DCLGEN COLSUFFIX(YES) OPTION WILL RESULT IN A MIXED FIELD NAME FOR COLUMN *colname*. THE *lang* LANGUAGE DOES NOT SUPPORT MIXED FIELD NAMES.

Explanation

The COLSUFFIX(YES) option and a double-byte NAMES prefix were specified in a DCLGEN invocation, but column *colname* contains single-byte characters. This combination would result in a generated field name with a mixture of double-byte and single-byte characters, but the *lang* language does not support mixed field names.

System action

DCLGEN set the return code to 4 and generated the field name as requested.

User response

This is a warning. Be aware that the declaration for column *colname* causes a compiler error. You must edit the declaration before including it in an application program.

DSNE955I *csect-name* COLSUFFIX(YES) WAS SPECIFIED WITHOUT A NAMES PREFIX. COLUMN NAMES WILL BE USED FOR FIELD NAMES

Explanation

When COLSUFFIX(YES) is specified in a DCLGEN invocation, DCLGEN generates field names by concatenating the NAMES prefix with the column names. However, no NAMES prefix was specified.

System action

DCLGEN set the return code to 4 and used the column names as field names.

User response

This is a warning. Specify a NAMES prefix when you specify COLSUFFIX(YES).

DSNE956A A FIELD NAME PREFIX MUST BE SPECIFIED WHEN COLUMN SUFFIX VALUE IS YES.

Explanation

When YES is specified for the COLUMN SUFFIX field on the DCLGEN panel, DCLGEN generates field names by concatenating the value in the FIELD NAME PREFIX field with the column names. However, no value was specified for FIELD NAME PREFIX.

System action

The DCLGEN panel generated this error message.

User response

Specify a FIELD NAME PREFIX value, or change the COLUMN SUFFIX value to NO.

DSNE957I THE LENGTH OF ONE OR MORE NAMES EXCEEDS THE STANDARD MAXIMUM ALLOWED BY THE *language* LANGUAGE

Explanation

DCLGEN was building a COBOL or PL/I language declaration for a table when it generated a host variable name that is longer than the language permits.

language
The language that the declaration uses: COBOL or PL/I

The new declaration might cause a compiler error.

System action

DCLGEN issues return code to 4 and processes the rest of the table.

User response

If you want to use this declaration in an application, edit the declaration so that the length of the host name variable is within the permitted range for the language.

DSNE958I DCLGEN DOES NOT SUPPORT THE SQL DATA TYPE *data-type* (SQLTYPE *sql-type*) FOR THE *language* LANGUAGE

Explanation

The specified table or view contains a column with a data type that is either not supported by or not recognized by DCLGEN.

data-type
The data type of the column.

sql-type
Numeric representation of the data type.

language
The programming language that was used for the data declaration: COBOL, PL/I, C, or C++.

System action

DCLGEN issues return code 8 and finishes processing the table. A declaration for the table or view is created, but it is incomplete and will not compile successfully without modifications.

User response

If the reported data type is UNKNOWN, contact IBM Support and provide the SQLTYPE value and programming language from the message.

For all other data types, verify that the data type that you want to use is supported by DCLGEN. If the data type that you originally chose is not supported, you might be able to identify an alternate data type. If you want to use the table or view declaration that DCLGEN created, update the generated declaration by either removing the column or changing the data type.

DSNE960E PARAMETER STRING EXCEEDS ALLOWABLE LIMIT OF 100 (DECIMAL) CHARACTERS

Explanation

The PARMS option parameter-string of the RUN subcommand cannot exceed 100 (decimal) characters in length.

System action

The TSO attachment facility is ready for more input.

User response

Correct the PARMS option and resubmit the job.

DSNE964E *csect-name* INVALID SYNTAX FOR *keyword* KEYWORD PARAMETER *parameter*

Explanation

A parameter that does not follow Db2 naming conventions was specified for *keyword*.

System action

Subcommand processing is terminated. The DSN command processor reissues the DSN prompt to allow you to enter another subcommand.

User response

Correct the keyword parameter value in error, and resubmit the command.

Related reference

BIND and REBIND options for packages, plans, and services (Db2 Commands)
BIND PLAN (DSN) (Db2 Commands)
BIND PACKAGE (DSN) (Db2 Commands)
REBIND PLAN (DSN) (Db2 Commands)
REBIND PACKAGE (DSN) (Db2 Commands)

DSNE965E ***parameter-value*** **IS NOT A VALID** ***keyword*** **KEYWORD PARAMETER**

Explanation

The *parameter-value* is not a valid parameter value for the keyword.

System action

Subcommand processing terminates. The DSN command processor reissues the DSN prompt to allow you to enter another subcommand.

User response

Correct and reissue the subcommand.

Related reference

BIND and REBIND options for packages, plans, and services (Db2 Commands)
DYNAMICRULES bind option (Db2 Commands)
BIND PACKAGE (DSN) (Db2 Commands)
BIND PLAN (DSN) (Db2 Commands)
REBIND PACKAGE (DSN) (Db2 Commands)
REBIND PLAN (DSN) (Db2 Commands)

DSNE966E ***connection-type*** **KEYWORD OMITTED FROM THE ENABLE| DISABLE DECLARATION**

Explanation

The *connection-type* keyword was not specified in either the ENABLE or DISABLE keywords and is required if connection-names are specified for the *connection-type*.

System action

Subcommand processing is terminated. DSN command processor reissues the DSN prompt to allow you to enter another subcommand.

User response

Correct the connection type parameter with values that are supported on the ENABLE and DISABLE keywords and reissue the subcommand.

Related reference

ENABLE and DISABLE bind options (Db2 Commands)

DSNE967E ***keyword-name*** **KEYWORD CANNOT BE SPECIFIED MORE THAN ONCE PER RUN**

Explanation

Either the BIND PACKAGE MEMBER or LIBRARY keywords specified more than one parameter value. Only one member or library name is permitted.

System action

Subcommand processing is terminated. The DSN command processor reissues the DSN prompt to allow another subcommand to be entered.

User response

Enter the corrected subcommand.

Severity

8

Related reference

BIND PACKAGE (DSN) (Db2 Commands)
BIND PLAN (DSN) (Db2 Commands)
MEMBER bind option (Db2 Commands)
LIBRARY bind option (Db2 Commands)

DSNE969E ***csect-name keyword1*** **IS MUTUALLY EXCLUSIVE WITH** ***keyword2***

Explanation

Both the PKLIST and NOPKLIST keywords, cannot be specified on one invocation of the REBIND PLAN subcommand. Both the ENABLE and DISABLE keywords cannot be specified on one invocation of the BIND/REBIND PLAN/PACKAGE subcommand.

System action

Subcommand processing is terminated. DSN command processor will reissue the DSN prompt to allow another subcommand to be entered.

User response

Enter the corrected subcommand.

Severity

8

Related reference

PKLIST and NOPKLIST bind options (Db2 Commands)
ENABLE and DISABLE bind options (Db2 Commands)
BIND PLAN (DSN) (Db2 Commands)
BIND PACKAGE (DSN) (Db2 Commands)
REBIND PLAN (DSN) (Db2 Commands)
REBIND PACKAGE (DSN) (Db2 Commands)

DSNE970E EITHER MEMBER OR PKLIST MUST BE SPECIFIED, BOTH ARE ALSO ALLOWED

Explanation

The BIND PLAN subcommand requires either the MEMBER or PKLIST keyword, and neither was specified. Either keyword or both may be specified.

System action

Subcommand processing is terminated. DSN command processor will reissue the DSN prompt to allow another subcommand to be entered.

User response

Enter the corrected subcommand.

Severity

8

Related reference

BIND PLAN (DSN) (Db2 Commands)
MEMBER bind option (Db2 Commands)
PKLIST and NOPKLIST bind options (Db2 Commands)

DSNE971E EITHER MEMBER OR COPY BUT NOT BOTH MUST BE SPECIFIED

Explanation

The BIND PACKAGE subcommand requires either the MEMBER or COPY keyword; both are not allowed on the same subcommand invocation.

System action

Subcommand processing is terminated and the DSN command processor will reissue the DSN prompt to allow another subcommand to be entered.

User response

Enter the corrected subcommand

Severity

8

Related reference

BIND PACKAGE (DSN) (Db2 Commands)

DSNE974E *csect-name keyword1* KEYWORD IS INVALID WITH *keyword2* KEYWORD.

Explanation

The *keyword2* cannot be specified with *keyword1*.

System action

Subcommand processing is terminated. The DSN command processor reissues the DSN prompt to allow another subcommand to be entered.

User response

Modify one of the keywords on the command and resubmit the job.

Related reference

BIND PACKAGE (DSN) (Db2 Commands)
BIND PLAN (DSN) (Db2 Commands)

DSNE975E *csect-name keyword* KEYWORD IS ONLY VALID WHEN COPY KEYWORD IS PRESENT

Explanation

A keyword was issued that may only be specified in conjunction with the COPY keyword.

keyword
COPYVER or OPTIONS

System action

Subcommand processing is terminated. The DSN command processor will reissue the DSN prompt to allow another subcommand to be entered.

User response

Enter the corrected subcommand.

Severity

8

Related reference

BIND PACKAGE (DSN) (Db2 Commands)

DSNE976E LIBRARY KEYWORD IS ONLY VALID WHEN MEMBER KEYWORD IS PRESENT

Explanation

The LIBRARY keyword may only be specified in conjunction with the MEMBER keyword.

System action

Subcommand processing is terminated. The DSN command processor will reissue the DSN prompt to allow another subcommand to be entered.

User response

Enter the corrected subcommand.

Severity

8

Related reference

BIND PACKAGE (DSN) (Db2 Commands)

Chapter 4. DSNF messages

Message identifiers that begin with DSNF communicate information about the message generator.

DSNF001I MESSAGE GENERATOR INITIALIZATION PARAMETERS NOT FOUND. DEFAULTS ASSUMED

Explanation

The message generator was unable to access the routing code initialization parameter defined by the DSN6SYSP macro. Default values defined by that macro are assumed.

System action

Subsystem initialization continues.

Operator response

Notify the system programmer.

System programmer response

It might be necessary to change the DSN6SYSP macro and replace the DSN6SYSP member of the DSNIPARM directory.

Related tasks

Defining Db2 initialization parameters: DSNTIJUZ (Db2 Installation and Migration)

DSNF700I *csect-name message-id* HAS BEEN ISSUED

Explanation

An unsuccessful attempt has been made to issue the message 'message-id'. This message is issued only if the requested message could not be found in the Db2 message directory.

System action

The system proceeds as though the requested message had been issued.

Operator response

Notify the system programmer.

System programmer response

Refer to this manual for actual message text. You need the message number ('message-id'). If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

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Chapter 5. DSNG messages

Message identifiers that begin with DSNG communicate information about the database descriptor manager.

DSNG001I **EDM *stype* CAN NOT BE DECREASED BELOW THE VALUE *isize* SPECIFIED AT DB2 STARTUP**

Explanation

The EDM *stype* storage cannot be decreased below the size that was specified at Db2 startup.

System action

Processing continues.

DSNG002I **EDM *storage-type* HAS AN INITIAL SIZE *initial-size*, REQUESTED SIZE *requested-size*, AND AN ALLOCATED SIZE *allocated-size***

Explanation

The size of an EDM storage pool has been changed.

storage-type
The type of EDM storage pool that was updated. Possible values are:

Value	Description
DBD CACHE	EDM DBD pool
RDS ABOVE	EDM RDS pool above
RDS BELOW	EDM RDS pool below
SKELETON	EDM statement pool
STMT POOL	EDM skeleton pool

initial-size
The storage size prior to the request for a change.

requested-size
The requested storage size.

allocated-size
The storage size in effect immediately after the request for a change.

If the request was for an increase to the EDM pool size, the *allocated-size* value is the storage available to satisfy the request.

If the request was for a decrease to the EDM pool size, the *allocated-size* value is the *initial-size* value reduced by the amount that could be released immediately. When the *allocated-size* value is larger than the *requested-size* value, the difference is marked to be released when it is no longer referenced.

System action

Processing continues.

User response

No action is required.

Related concepts
EDM storage (Db2 Performance)

DSNG003I **INSUFFICIENT VIRTUAL STORAGE TO EXPAND EDM *stype* STORAGE**

Explanation

Insufficient virtual storage exists to expand the EDM *stype* storage as specified.

System action

The EDM *stype* storage is expanded only to the size allowed by the available virtual storage.

DSNG004I **EDM *stype* HAS A FINAL ALLOCATED SIZE *asize***

Explanation

This message is issued in response to a request to decrease the EDM *stype* storage. The message is issued when the requested new level is reached.

stype
The EDM pool that is being reduced. Possible values are Pool, DBD Pool, or Statement Pool.

asize
The EDM *stype* storage that is available.

System action

Processing continues.

DSNG005I **DBD IS INCONSISTENT WITH THE CATALOG. UNABLE TO FIND A ROW IN SYSTABLES WITH DBID *dbid* AND OBID *obid*.**

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Explanation

This message is issued in response to a request to load a database with DBID *dbid*. This message is issued when the row is not found in SYSTABLES.

dbid
DBID of the database that is being loaded.

obid
OBID of a table in the database.

System action

DBD could not be loaded.

Operator response

Based on *dbid* and *obid* from the message, verify that the row does not exist in the Catalog. REPAIR DBD TEST or DIAGNOSE can be run to gather more diagnostic information. Once you have determined that the Catalog contains the correct information, REPAIR DBD REBUILD can be run to rebuild the DBD.

Severity

8 (error).

DSNG006I **DBD IS INCONSISTENT WITH THE CATALOG. UNABLE TO FIND A ROW IN SYSCOLUMNS WITH DBID *dbid*, OBID *obid*, AND COLUMN NUMBER *colno*.**

Explanation

This message is issued in response to a request to load a database with DBID *dbid*. This message is issued when the row is not found in SYSCOLUMNS.

dbid
DBID of the database that is being loaded.

obid
OBID of a table in the database.

colno
Column number in the table.

System action

DBD could not be loaded.

Operator response

Based on *dbid*/*obid*/*colno* from the message, verify that the row does not exist in the Catalog. REPAIR DBD TEST or DIAGNOSE can be run to gather more diagnostic information. Once you have determined that the Catalog contains the correct information, REPAIR DBD REBUILD can be run to rebuild the DBD.

Severity

8 (error).

DSNG007I **DB2 CATALOG LEVEL (*catalog-level*) CODE LEVEL (*code-level*) MODE (*system-mode*)**

Explanation

This message is issued when the database descriptor for the Db2 catalog is loaded into memory. It displays the Db2 catalog and code release levels and a mode indicator.

catalog-level
Four-character indicator of the Db2 catalog release level.

1010
Db2 10

1110
Db2 11

code-level
Four-character indicator of the Db2 code release level.

1010
Db2 10

1110
Db2 11

system-mode
Two- or three-character indicator of the current mode of the system:

C*n*
Conversion mode

C*n***
Conversion mode, but the system detects that it has been to a higher level

E*n*
Enabling-new-function mode

E*n***
Enabling-new-function mode, but the system detects that it has been to a higher level

N
New-function mode

System action

Processing continues.

User response

No action is required.

Related concepts
Db2 migration modes (Db2 Installation and Migration)

DSNG008I EDM RDS BELOW STORAGE HAS AN INITIAL LIMIT *initial-limit* AND A NEW LIMIT *new-limit*.

Explanation

The limit for EDM RDS BELOW storage has been changed. The new limit takes effect immediately.

initial-limit
The limit prior to the request for a change.

new-limit
The limit in effect after the request for a change.

A `resource unavailable` condition can occur when the limit is decreased and the amount of storage in use was already at or near the new limit.

System action

Processing continues.

User response

No action is required.

Related tasks

Designing EDM storage space for performance (Db2 Performance)

DSNG009I *csect-name* TABLE SPACE DSNDB01.SPT01 IS IN REORG PENDING STATE

Explanation

The change to the inline length of the SPTSEC_DATA column of SPT01 is complete, and the new length is shorter than the current length.

csect-name
The name of the control section that issued the message.

System action:
The SPT01 table space is placed in restrictive REORG-pending (REORP) state.

User response:
Reorganize the SPT01 table spaces to remove the REORP state. When the SPT01 table space is in REORP state binds cannot be processed.

Related reference

SPT01 INLINE LENGTH field (SPT01_INLINE_LENGTH subsystem parameter) (Db2 Installation and Migration)

DSNG010I *csect-name* SPT01 INLINE LENGTH CHANGE SUCCESSFUL, LENGTH *new-size*

Explanation

The SPT01 inline length was successfully changed.

csect-name
The name of the control section that issued the message.

new-size
The new inline length, in bytes.

System action

Processing continues.

User response

No action is required.

Related reference

SPT01 INLINE LENGTH field (SPT01_INLINE_LENGTH subsystem parameter) (Db2 Installation and Migration)

DSNG011I *csect-name* SPT01 INLINE LENGTH CHANGE UNSUCCESSFUL, LENGTH *size*

Explanation

The SPT01 inline length was not changed.

csect-name
The name of the control section that issued the message.

size
The size of the inline length in bytes.

System action

Processing continues.

User response:
Check the console for a DSNT500I message.

Related reference

SPT01 INLINE LENGTH field (SPT01_INLINE_LENGTH subsystem parameter) (Db2 Installation and Migration)

Chapter 6. DSNH messages

Message numbers that begin with DSNH communicate information about the Db2 precompiler or the Db2 coprocessor.

References to the Db2 precompiler will also apply to the Db2 coprocessor, unless otherwise mentioned. The Db2 coprocessor is invoked through the compiler.

Message line numbers

The line number *nnnn* in DSNH messages is generated by assigning sequential numbers to the original source. The numbers are printed on the SQL Db2 precompiler source listing (if the SOURCE option is specified to the precompiler). If you are using the Db2 coprocessor, the error messages and their line numbers, if applied, are printed on the compiler output listing. The line number points to the beginning of the SQL statement. The column number, if it can be determined, is a relative number from the beginning of the SQL statement that is in error.

'COL *cc*' in the messages identifies the source column in which the condition was detected. The indicated column, '*cc*', usually specifies the location of the column containing the first character of the associated source token. However, if the precompiler cannot determine this location, it is the beginning of the statement. Because the detected error might be similar to a valid, but different, construction, the SQL parsing might indicate the wrong location for the error.

Message severity codes

One of the characters I, W, E, S, or U is shown at the beginning of each precompiler message as an aid to the programmer. These characters indicate the severity level as follows:

I	0	Informational
W	4	Warning
E	8	Error
S	12	Severe error
U	16	Unrecoverable error

When unsupported non-Db2 statements are detected during SQL(ALL) precompilation, the return code will be forced to 4 if the return code was 8, and no host-related errors were detected. This is done so that the application can proceed with the compilation and link-edit steps. This allows the syntax checking to be delayed until bind. If a severity 8 precompiler error message is not a host-related error, the precompiler treats the error as a warning and place a W instead of an E in the precompiler output listing. In this instance, the precompiler also issues DSNH049I to indicate that the actual return code 8 from the precompiler was changed to 4.

The following precompiler messages with severity levels of 8 are not changed from errors to warnings when SQL(ALL) is in effect:

- DSNH051I
- DSNH080I
- DSNH290I
- DSNH291I
- DSNH292I
- DSNH312I
- DSNH313I
- DSNH314I

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- DSNH504I

Source tokens

Tokens from your source program do not always appear in messages exactly as they appear in your program. For example, leading zeros are removed from integer tokens.

DSNH003I **S *csectname* FILE *ddname* PARAMETERS INCORRECT**

Explanation

The file *ddname* has invalid or incorrect parameters, such as logical record length.

System action

The precompiler is terminated.

User response

Correct the data set or library parameters.

Severity

12 (severe error)

DSNH004I **S *csectname type* COULD NOT BE FOUND**

Explanation

The precompiler could not find the indicated type of statement in the application program source. This message is only issued for HOST(COBOL) and HOST(COB2). The *type* is DATA DIVISION, WORKING-STORAGE SECTION, or PROCEDURE DIVISION. This error can cause other errors.

System action

Processing continues. Additional errors might result.

User response

Ensure that the host language statement in your application program is correct and that the statement is present within the proper margins.

Severity

12 (severe error)

DSNH005I **U *csectname* FILE *ddname* NO MEMBER NAME SPECIFIED**

Explanation

The *ddname* must refer to a partitioned data set, and the member name must be specified in the allocation. This helps to prevent accidental erasure of the DBRM library.

System action

The precompiler is terminated.

User response

Correct the JCL or TSO allocate command to specify a member name.

Severity

16 (unrecoverable error)

DSNH006I **U *csectname* FILE *ddname* COULD NOT BE OPENED**

Explanation

The file identified in the message is required, but it could not be opened.

System action

The precompiler is terminated.

System programmer response

Ensure that the SYSIN data is provided. Also ensure that SYSLIB is defined if the application program contains SQL INCLUDE statements.

User response

Ensure that the file is present in your JCL.

Severity

16 (unrecoverable error)

DSNH007I **E *csectname* LINE *nnnn* COL *cc* ILLEGAL CHARACTER IGNORED: '*c*' ('*hh*'X)**

Explanation

The character identified in the message as *c* is not permitted. The hexadecimal representation for the character is *hh*.

System action

The character is ignored.

User response

Correct the character. You might need to place the character within quotation marks or apostrophes. Check to ensure that the CCSID in which the source is written matches the CCSID option for the Precompiler. For example, if the CCSID 1047 codepoints for left and right square brackets (hexadecimal 'AD' and 'BD') are used in a C source program, ensure that the Precompiler CCSID option is CCSID(1047).

Severity

8 (error)

DSNH008I **S *csectname* LINE *nnnn* COL *cc* NESTED INCLUDE NOT SUPPORTED**

Explanation

While processing an INCLUDE, another nested INCLUDE statement was encountered.

System action

The nested INCLUDE statement is ignored.

User response

Remove the nested INCLUDE statements; they are not allowed in an included file. The Db2 precompiler permits only one level of INCLUDE statements.

Severity

12 (severe error)

DSNH009I **S *csectname* LINE *nnnn* COL *cc* MEMBER *name* COULD NOT BE INCLUDED**

Explanation

The identified member name was not found or could not be read.

System action

Processing continues without the data from that member.

User response

Ensure that the member is in the library and that its name is spelled correctly. Check and correct any JCL errors. They are likely to cause other errors. Ensure that the data set and library parameters are correct.

Severity

12 (severe error)

DSNH010I **S *csectname* LINE *nnnn* COL *cc* UNTERMINATED STRING CONSTANT BEGINNING *text***

Explanation

The constant identified in the message as '*text*' is not terminated properly.

System action

The string is treated as if it were terminated by the end of file.

User response

Terminate the string constant. Check for and correct any missing or extra quotation marks and apostrophes. These errors are likely to cause others. Some statements were probably missed because of missing or extra string delimiters.

Severity

12 (severe error)

DSNH011I **S *csectname* LINE *nnnn* COL *cc* UNTERMINATED COMMENT**

Explanation

A comment is not terminated properly. This message is only issued for HOST(PLI) and HOST(C).

System action

The string is treated as if it were terminated by the end of file.

User response

Ensure that the comment terminator is typed properly and that it is within the specified margins. This error is likely to cause others. Some statements were probably missed because of the missing comment terminator.

Severity

12 (severe error)

DSNH012I **W *csectname* LINE *nnnn* COL *cc* INVALID CONTINUATION**

Explanation

The continuation does not follow the host language rules.

System action

Processing continues. Additional errors might result.

User response

Follow the host language continuation rules and embedded SQL continuation rules. Check the margin option. This error is most common in assembler language in cases where a continuation begins before the continuation column (the continuation column is column 16 by default).

Severity

4 (warning)

DSNH013I **E *csectname* LINE *nnnn* COL *cc* SQL STATEMENT FOUND OTHER THAN IN THE FIRST PROGRAM (OR MAIN PROGRAM)**

Explanation

This message is for VS COBOL II only. If any SQL statement is found in the source after the first program in a BATCH COMPILE or the end of the main program of a nested program, this message is issued.

System action

The precompiler is terminated.

User response

Move up the SQL statement and corresponding host variable declaration to the main program or to the first program and resubmit the job.

Severity

8 (error)

DSNH014I **S *csectname* LINE *nnnn* COL *cc* SQL STATEMENT IS FOUND IN AN INAPPROPRIATE PLACE**

Explanation

If any SQL statement is found in the COBOL DECLARATIVES section, this message is issued.

System action

Processing continues. Additional errors might result.

User response

Move the SQL statement out of the COBOL DECLARATIVES section and resubmit the job.

Severity

12 (severe error)

DSNH016I **E *csectname* LINE *nnnn* COL *cc* *token* REQUIRED**

Explanation

The required character or keyword identified as *token* is missing.

System action

The token is assumed to be present in order to continue checking the statement syntax.

User response

Correct the SQL statement. Determine if you skipped either this keyword or another keyword earlier in the SQL statement. The assumed token is printed in the SYSTEM error message. This token might not be what you intended, even though it is the only symbol allowed in the clause at this point.

Severity

8 (error)

DSNH019I **W *csectname* OPTION: INVALID OPTION *option***

Explanation

The identified option was requested, but it is not a precompiler option.

System action

The option is ignored.

User response

Check the valid precompiler options to determine if your spelling is correct for this option. This problem might cause additional errors if the APOST, APOSTSQL, COMMA, HOST, MARGINS, QUOTESQL, or TWOPASS option is needed but not specified. The other options are either defaults or affect only the listing. Correct the problem and run the precompile again.

Severity

4 (warning)

DSNH021I **W *csectname* OPTION: SUBOPTION NOT PERMITTED WITH OPTION *option***

Explanation

The identified option cannot have suboptions, but one or more were specified.

System action

The suboptions are ignored.

User response

None is required. However, you should remove the suboption.

Severity

4 (warning)

DSNH022I **W *csectname* OPTION: UNMATCHED ')' TAKEN AS ','**

Explanation

An unmatched ending parenthesis was found before the end of the option string.

System action

The parenthesis is assumed to be a comma.

User response

Balance the parentheses.

Severity

4 (warning)

DSNH023I **W *csectname* OPTION: SUBOPTION MISSING FOR OPTION *option***

Explanation

The specified option requires a suboption, but one was not provided.

System action

The option is ignored.

User response

Provide a suboption or remove the option. This problem might cause additional errors if the HOST or MARGINS option is needed but not specified. The other options are either defaults or affect only the listing. Correct the problem and run the precompile again.

Severity

4 (warning)

DSNH024I **W *csectname* OPTION: SUBOPTION *suboption* INVALID FOR OPTION *option***

Explanation

The identified suboption is not allowed for the option specified.

System action

The entire option is usually ignored.

User response

Refer to the 'options used' list in the precompiler output listing to see if the option was used. Remove the suboption.

Severity

4 (warning)

DSNH025I **W *csectname* OPTION: EXCESSIVE SUBOPTIONS FOR OPTION *option***

Explanation

Too many suboptions were given for the identified option.

System action

The excess suboptions are ignored.

User response

Remove excess suboptions.

Severity

4 (warning)

DSNH026I **W *csectname* OPTION: INVALID MARGINS FOR HOST LANGUAGE**

Explanation

The host language does not permit the specified margins.

System action

The MARGINS option is ignored.

User response

Ensure that the source statements are within the proper margins and that the margins are specified correctly. The margins for COBOL must be 8, 72. The margins for FORTRAN must be 1, 72.

Severity

4 (warning)

DSNH027I **W *csectname* SUBOPTION *suboption* TOO LONG, TRUNCATED AFTER *numofchar* CHARS**

Explanation

The version ID is greater than *numofchar* bytes long. The maximum length for the version ID is 64 bytes.

System action

The option is honored, but the version ID is truncated after 64 bytes.

User response

Refer to the 'options used' list in the precompiler output to see what version ID was used.

Severity

4 (warning)

DSNH028I **W *csectname* ATTACH SUBOPTION *suboption* NOT PERMITTED WITH HOST (FORTRAN) SPECIFIED.**

Explanation

The identified suboption for precompiler option ATTACH cannot take effect when the application is a FORTRAN application because the interface code for FORTRAN is always DSNHFT.

System action

The option is ignored.

User response

None is required. However, you can either code ATTACH(TSO) or specify no ATTACH precompiler option

Severity

4 (warning)

DSNH029I **E *csectname* LINE *nnnn* COL *cc* INTO CLAUSE REQUIRED**

Explanation

SELECT statements embedded in an application program must have an INTO clause to denote where the results of the SELECT are to be placed. Dynamic SELECT statements do not permit the INTO clause.

System action

The statement is replaced by host language statements that, if executed, set an error code in the SQLCA.

User response

Add the INTO clause to the SELECT statement, and precompile the application program again.

Severity

8 (error)

DSNH030I **W *csectname* LINE *nnnn* COL *cc* STATEMENT CONTAINS WRONG NUMBER OF 'INTO' VARIABLES**

Explanation

The number of variables specified in an INTO clause is not the same as the number of select-list elements (taking into account expansion of host structures and '*' or 'table.*' select entries according to the declarations supplied).

System action

Processing continues.

User response

Ensure the included table declarations are correct. If the declarations are correct, this statement causes an error when the application program is bound. If the declarations are incorrect, you can proceed, but the declarations should be corrected. Otherwise, you need to correct the SQL statement and precompile again.

Severity

4 (warning)

DSNH031I **W *csectname* LINE *nnnn* COL *cc* STATEMENT CREATES A COLUMN WITH NAME *name1* WHICH DOES NOT MATCH DECLARED NAME *name2***

Explanation

The column name specified in a CREATE statement (*name1*) is not the same as the name of the

corresponding column in the DECLARE TABLE statement (*name2*).

System action

Processing continues.

User response

Ensure that the DECLARE TABLE matches the CREATE TABLE. You can use the cross-reference and source listings to help find the two statements.

Severity

4 (warning)

DSNH032I **W *csectname* LINE *nnnn* COL *cc* STATEMENT CREATES A COLUMN *name* WHOSE ATTRIBUTES DO NOT MATCH THE DECLARATION**

Explanation

The column *name* is specified in a CREATE statement with a different data type or length than was specified for the corresponding column in the DECLARE TABLE statement.

System action

Processing continues.

User response

Correct the DECLARE TABLE or CREATE TABLE statement. If the DECLARE TABLE statement is incorrect, some warnings might also be incorrect or might not be generated when needed. If the CREATE TABLE statement is incorrect, you must correct it.

Severity

4 (warning)

DSNH033I **W *csectname* LINE *nnnn* COL *cc* STATEMENT CREATES MORE OR LESS COLUMNS THAN WERE DECLARED**

Explanation

The number of columns specified in a CREATE statement is different from the number of columns specified in the DECLARE TABLE statement.

System action

Processing continues.

User response

Ensure that the DECLARE TABLE matches the CREATE TABLE. If the DECLARE TABLE statement is incorrect, some warnings might also be incorrect or might not be generated when needed. If the CREATE TABLE statement is incorrect, you must correct it.

Severity

4 (warning)

DSNH034I **W *csectname* LINE *nnnn* COL *cc* STATEMENT INSERTS MORE OR LESS VALUES THAN THE NUMBER OF COLUMNS DECLARED**

Explanation

The number of values specified in an INSERT operation is different from the number of columns specified in the DECLARE TABLE statement for the receiving table.

System action

Processing continues.

User response

Insert the correct number of values. If the DECLARE TABLE statement is incorrect, this warning might also be incorrect. If the INSERT operation is incorrect, you must correct it.

Severity

4 (warning)

DSNH038I **S *csectname* LINE *nnnn* COL *cc* PROGRAM OR SUBPROGRAM CONTAINS MORE THAN 32767 SQL STATEMENTS**

Explanation

The number of SQL statements in an application program or a FORTRAN subprogram is greater than 32767.

System action

The precompiler terminates.

User response

Divide the application program or subprogram into smaller programs or reduce the SQL statements in each program unit so that the maximum number of SQL statements is not exceeded.

Severity

12 (severe error)

DSNH041I **W *csectname* OPTION: MISSING HOST OPTION**

Explanation

The host language was not specified in the OPTION field.

System action

HOST(COBOL) is assumed.

User response

Specify the host language if it is not COBOL. It is probably best to specify the host language and remove all warnings.

Severity

4 (warning)

DSNH042I **W *csectname* OPTION: *option* OPTION INVALID FOR HOST LANGUAGE**

Explanation

The option identified in the message is not valid. The QUOTE and COMMA options are not permitted with HOST(ASM), HOST(PLI), or HOST(C). The TWOPASS option is not permitted with HOST(COBOL).

System action

The specified option is ignored.

User response

Remove the invalid option, or correct the host specification.

Severity

4 (warning)

DSNH049I **W *csectname* RETURN CODE IS FORCED TO 4 BECAUSE OPTION SQL(ALL) IS IN EFFECT, ORIGINAL RETURN CODE WAS *nnn***

Explanation

One or more SQL-related error messages were detected by the precompiler, but because of option SQL(ALL), the return code is forced to 4 in order to let the application proceed with compilation.

The SQL syntax checking is deferred until bind time because the source might contain non-Db2 SQL syntax that the Db2 precompiler does not recognize and flags as an error. The DBRM produced by this precompilation cannot be bound successfully by Db2 if there are SQL syntax errors or non-Db2 SQL syntax.

The return code remains untouched if there are host-related syntax or semantic errors in the source.

System action

Processing continues.

User response

Ensure that the intention of this precompilation is for executing it in a non-Db2 system.

Severity

4 (warning)

DSNH050I **I *csectname* WARNINGS HAVE BEEN SUPPRESSED DUE TO LACK OF TABLE DECLARATIONS**

Explanation

One or more warning messages were suppressed because no table declarations were found before the first SQL statement that referenced a table or column.

System action

Processing continues. Suppression is discontinued if a table declaration is found.

User response

Insert (or INCLUDE) table declarations before they are referenced in order to permit table and column checking.

Severity

0

DSNH051I **E *csectname* LINE *nnnn* COL *cc* *sqltype name* PREVIOUSLY DECLARED OR REFERENCED**

Explanation

The variable *sqltype* is TABLE, CURSOR, or STATEMENT. The identifier *name* was already defined with the given *sqltype*. The definition might have occurred implicitly. For example, *name* might have been found in the FROM clause of a SELECT, causing it to be defined as a table.

System action

The name is installed in the symbol table as a duplicate.

User response

Remove duplicate definitions, or correct the references. Avoid implicit definitions by inserting (or including) table declarations before they are referenced. Check the number of passes used. Use the cross-reference and source listings to help resolve this type of error.

Severity

8 (error)

DSNH052I **E *csectname* LINE *nnnn* COL *cc* COLUMN *name* IS ALREADY DEFINED IN TABLE *table-name***

Explanation

The identified name is already defined as a column in the table named *table-name*. The definition might have occurred implicitly. For example, *table-name* might have been found in a select-list, causing *name* to be defined as a column within *table-name* if *table-name* was not declared as a host variable.

System action

The name is installed in the symbol table as a duplicate.

User response

Remove duplicate definitions, or correct the references. Avoid implicit definitions by inserting (or including) table declarations before they are referenced.

Severity

8 (error)

DSNH053I **W *csectname* NO SQL STATEMENTS WERE FOUND**

Explanation

No SQL statements were found in the precompiler input file. An empty DBRM member was written.

System action

Processing continues.

User response

If you embedded SQL statements in your application program and none were found, make sure your column margins are properly defined for your application program.

Severity

4 (warning)

DSNH057I **E *csect-name* LINE *line-number* COL *column number* RETURN STATEMENT IN AN SQL FUNCTION MUST RETURN A VALUE**

Explanation

A RETURN statement is specified without a value in an SQL function. The return value must be specified.

csect-name
The name of the control section that issued the message.

line-number* and *column number
The location of the error in the source program.

System action

The statement can not be processed.

User response

Add a return value to the statement, and try the request again.

Severity

8 (error)

DSNH060I **E *csectname* LINE *nnnn* COL *cc* INVALID *type* SPECIFICATION: *spec***

Explanation

The *type* is either SCALE or LENGTH. The *spec* is the given SCALE or LENGTH specification in an SQL declaration. Length and scale specifications must be unsigned integers. The scale specification, where permitted, cannot exceed the length. The length specification cannot be 0.

System action

Processing continues.

User response

Correct the length or scaling.

Severity

8 (error)

DSNH078I **E *csect-name* LINE *line-number* COL *column number* PARAMETER NAMES MUST BE SPECIFIED FOR ROUTINE *routine-name***

Explanation

The routine does not have parameter names specified for all parameters.

csect-name
The name of the control section that issued the message.

line-number* and *column number
The location of the error in the source program.

routine-name
The name of the routine.

When the SQL routine is defined with LANGUAGE SQL, a parameter name is required for each parameter that is defined. For native SQL procedures, LANGUAGE SQL is optional, but for external SQL procedures, LANGUAGE SQL is required.

System action

The statement cannot be processed.

Programmer response

Ensure that each defined parameter includes a parameter name.

Severity

8 (error)

DSNH080I **E *csectname* LINE *nnnn* COL *cc* *usage* VARIABLE *name* IS NOT *type* TYPE**

Explanation

The *usage* is INDICATOR or STRING. The *type* is SMALLINT, VARCHAR, or CHARACTER. The data type of the variable *name* is not acceptable. All indicator variables must be small integers. PREPARE and EXECUTE strings must be variable character strings, except for FORTRAN, which requires character type.

System action

If the containing SQL statement is a declaration, it is discarded. If the containing SQL statement is executable, it is replaced by host language statements that will, if executed, set an error code in the SQLCA.

User response

Specify a host variable of the proper type.

Severity

8 (error)

DSNH081I **W *csectname* LINE *nnnn* COL *cc* STATEMENT DOES NOT CONFORM TO ANS SYNTAX STANDARD - REASON CODE *ccc***

Explanation

When the precompiler option STDSQL(YES) is in effect, the SQL syntax is checked to see if it conforms to the ANSI/ISO SQL standard of 1992. Reason codes are:

000
Aggregate function with DISTINCT as an arithmetic-operation operand does not conform to the ANSI/ISO SQL standard of 1992.

001
FOR UPDATE OF as part of a DECLARE CURSOR statement does not conform to the ANSI/ISO SQL standard of 1992.

System action

Processing continues.

System programmer response

Check the SQL statement.

User response

You have the option of changing or not changing the syntax to conform to the ANS syntax standard.

Severity

4 (warning)

DSNH083I **I *csectname* LINE *nnnn* COL *cc* IBM SQL RESERVED WORD *ibmkeywd* SPECIFIED AS AN IDENTIFIER NAME**

Explanation

When the precompiler option SQL(ALL) is in effect, IBM SQL reserved words should not be used as identifier names. Using IBM SQL reserved words limits the portability of the statement.

System action

Processing continues.

User response

If possible, change the identifier name to a non-IBM SQL reserved word so that the statement conforms to the IBM SQL standard. Not changing the identifier name means that the program is less portable within the IBM SQL environment.

Severity

0 (informational)

DSNH084I **W *csectname* LINE *nnnn* COL *cc* UNACCEPTABLE SQL STATEMENT**

Explanation

The referenced SQL statement is not allowed in this situation, but it will not cause an error. Depending on the option specified at precompile time, one of the following occurred.

- The BEGIN DECLARE SECTION(*), END DECLARE SECTION(*), and UPDATE STATISTICS statements are flagged as not compatible.

  * For C applications, BEGIN and END DECLARE SECTION are not flagged.

  * For other languages, the statement is only allowed with precompiler option STDSQL(YES).
- Using the STDSQL(YES) precompiler option, the INCLUDE SQLCA statement is flagged as a warning.

System action

The BEGIN DECLARE SECTION, END DECLARE SECTION, and INCLUDE SQLCA statements are ignored. The other statements are replaced by host language statements that will, if executed, set a warning code or SQLCODE -84 in the SQLCA.

User response

Unless this application program is used in a portable manner, remove the statement.

Severity

4 (warning)

DSNH088I **W *csectname* LINE *nnnn* COL *cc* THIS STATEMENT WILL *action* AN ENTIRE TABLE**

Explanation

The *action* is either DELETE or UPDATE. The referenced SQL statement has no WHERE clause and will delete or update all rows of the specified table. This message is printed as a warning to the programmer.

System action

Processing continues.

User response

Be sure that you intend to delete or update all rows, or add a suitable WHERE clause.

Severity

4 (warning)

DSNH090I **S *csectname* LINE *nnnn* COL *cc* HOST VARIABLE NOT PERMITTED HERE: *name***

Explanation

Host variable references are not permitted in this type of SQL statement. The *name* is invalid.

System action

The statement is replaced by host language statements that will, if executed, set an error code in the SQLCA.

User response

Specify a literal or a column name rather than a host variable. The colon (:) indicates that the name that follows is a host variable. Remove it to specify a column name.

Severity

12 (severe error)

DSNH091I **I *csectname* LINE *nnnn* COL *cc* EBCDIC CCSID used for string-expression.**

Explanation

In a PL/1 application program, a string-expression was specified for a PREPARE or EXECUTE IMMEDIATE statement, and the precompiler-generated structures for this string-expression specify an EBCDIC CCSID.

System action

Processing continues.

User response

If you intended that the string-expression should be treated as a string expression, then no action is required.

If the string-expression consists of just one host variable, and you intended that the string-expression

should be treated as a host variable, then the host variable must be preceded by a colon, and at least one DECLARE VARIABLE statement must be contained in your program source.

If you add a DECLARE VARIABLE for any host variable in your program source, and re-precompile your application, the variable previously treated as a string-expression by the precompiler will be treated as a host variable and this message will not be issued.

Severity

0 (informational)

DSNH097I **E *csectname* LINE *nnnn* COL *cc*. THE USE OF LONG VARCHAR OR LONG VARGRAPHIC IS NOT ALLOWED IN THIS CONTEXT.**

Explanation

The statement attempted to use the LONG VARCHAR or LONG VARGRAPHIC syntax. This syntax cannot be used for the following statements:

- CAST syntax
- CREATE DISTINCT TYPE
- CREATE FUNCTION
- CREATE PROCEDURE
- ALTER FUNCTION
- COMMENT ON FUNCTION
- GRANT EXECUTE ON FUNCTION
- REVOKE EXECUTE ON FUNCTION

System action

The statement cannot be executed.

User response

Correct and reissue the failing statement.

Severity

8 (error)

DSNH101I **S *csectname* THE STATEMENT IS TOO LONG OR TOO COMPLEX.**

Explanation

The statement cannot be executed because it exceeds the system limits for either length or complexity.

System action

The statement cannot be executed.

User response

Break the statement into shorter or less complex SQL statements.

Severity

16

DSNH102I **E *csectname* STRING CONSTANT IS TOO LONG. STRING BEGINS *string***

Explanation

The string constant beginning with *string* has a length greater than the maximum allowed length. Most strings have these limits:

- For a hexadecimal constant (X, GX, or UX), the number of hexadecimal digits must not exceed 32704.
- Any other character string constant must be short enough so that its UTF-8 representation requires no more than 32704 bytes.
- Any other graphic string constant must be short enough so that its UTF-8 representation requires no more than 32704 bytes.
- The sum of the lengths of the UTF-8 representations of the constant values in an ENDING AT clause must not exceed 765 bytes. This clause applies to CREATE TABLE, ALTER TABLE, CREATE INDEX, or ALTER INDEX.

In some contexts, however, the limit is smaller.

For special registers, the allowable length depends on the particular special register. A string that exceeds the limit can be specified only through assignment from a host variable. If this release of Db2 increases the maximum allowed length of a string constant, then an attempt to exploit the new length before using the New Function Mode produces this SQL return code.

Two consecutive string delimiters are used to represent one string delimiter within the character string, but these count as 2 bytes when calculating the lengths of character string constants.

System action

If the SQL statement containing the string is a declaration, it is discarded. If the SQL statement containing the string is executable, it is replaced by host language statements that, if executed, set an error code in the SQLCA.

User response

Correct the string. If a shorter string is acceptable, reduce the length of the string constant. If a long string is required, a host variable is required.

Severity

8 (error)

Related concepts

SQL communication area (SQLCA) (Db2 SQL)

Related reference

Limits in Db2 for z/OS (Db2 SQL)

DSNH103I **E *csectname constant* IS AN INVALID NUMERIC CONSTANT**

Explanation

The *token* was found. It begins with a digit, but it is not a valid integer, decimal, or float literal. Identifiers cannot begin with a digit except for the WHENEVER statement with HOST(FORTRAN), and the identifiers in COBOL.

System action

If the containing SQL statement is a declaration, it is discarded. If the containing SQL statement is executable, it is replaced by host language statements that will, if executed, set an error code in the SQLCA.

User response

Check the indicated token for validity. For a character literal, use apostrophes or quotation marks. For a number, remove the invalid characters.

Severity

8 (error)

DSNH104I **E *csectname* LINE *nnnn* COL *cc* ILLEGAL SYMBOL "*token*". SOME SYMBOLS THAT MIGHT BE LEGAL ARE: *token-list***

Explanation

A syntax error was detected where the symbol "*token*" occurs in the SQL statement. The list of symbols that might be legal shows some alternate symbols that could possibly be correct at that point, if the preceding part of the statement is entirely correct.

However, the preceding part of the statement might be incorrect. For example, if an important keyword is omitted, Db2 detects the error later, and not always immediately after the point where the keyword should appear. The list of alternate symbols are only suggestions.

System action

If the containing SQL statement is a declaration, it is discarded. If the containing SQL statement is executable, it is replaced by host language statements that will, if executed, set an error code in the SQLCA.

User response

Correct the statement and precompile the program again.

Severity

8 (error)

DSNH105I **E *csectname* LINE *nnnn* COL *cc*, INVALID STRING CONSTANTS**

Explanation

Incorrect graphic or mixed data literals were found on line *nnnn*, column *cc*.

System action

The literal is ignored and the SQL statement containing the problem is discarded.

System programmer response

Check for a quote, an apostrophe, shift-out (so) or shift-in (si) characters, G or N characters, or the number of characters within the literal.

User response

Specify the correct format of literals.

Severity

8 (error)

DSNH107I **E *csectname* LINE *nnnn* COL *cc* THE NAME *name* IS TOO LONG. MAXIMUM ALLOWABLE SIZE IS *size***

Explanation

The identified *name* values exceeded the maximum supported length.

If this release of Db2 increases the maximum allowed length of a name, then an attempt to exploit the new length when the value of the NEWFUN option is NO will produce this message.

System action

If the SQL statement containing the problem is a declaration, it is discarded. If the SQL statement containing the problem is executable, it is replaced by host language statements that will, if executed, set an error code in the SQLCA.

User response

Correct the name length.

Severity

8 (error)

Related concepts

SQL communication area (SQLCA) (Db2 SQL)

Related reference

Limits in Db2 for z/OS (Db2 SQL)

DSNH109I **E *csect-name* LINE *nnnn* COL *cc* *clause-type* CLAUSE NOT PERMITTED**

Explanation

A clause was used where it is not permitted.

csect-name
The name of the control section that issued the message.

nnnn* and *cc
The location of the clause, stated as a line number and column number.

clause-type
The type of clause.

Possible causes for this message can include:

- A SELECT INTO statement cannot include a FOR UPDATE OF clause, because position is not retained.
- SELECT clauses used in cursor declarations or subselects cannot have an INTO clause because the INTO clause is on the FETCH statement.
- A SELECT INTO statement cannot specify a KEEP UPDATE LOCKS clause, except in a USE AND KEEP UPDATE LOCKS clause.
- CREATE VIEW statements cannot include any of the following clauses:
  - INTO
  - ORDER BY
  - FOR UPDATE
  - USING
  - LARGE
  - CORRELATION NAME
- The UNION operator is not allowed in an embedded SELECT clause.
- A CREATE TABLESPACE statement cannot specify LOCKPART without the NUMPARTS option.
- An ALTER TABLESPACE statement cannot specify LOCKPART for a non-partitioned table space.
- A table space with LOCKPART YES cannot be altered to LOCKSIZE TABLESPACE.
- A table space with LOCKSIZE TABLESPACE cannot be altered to LOCKPART YES.
- The LARGE clause without the NUMPARTS option is not allowed in a CREATE TABLESPACE statement.
- DESCRIBE INPUT statement can not have USING clause.
- The table being updated in a POSITIONED UPDATE statement can not be assigned a correlation name.
- On a CREATE INDEX statement, the INCLUDE clause is not allowed for any of the following indexes:
  - A non-unique index
  - A partitioning index, when index-controlled partitioning is being used
  - An XML index
  - An extended index

System action

If the containing SQL statement is a declaration, it is discarded. If the containing SQL statement is executable, it is replaced by host language statements that will, if executed, set an error code in the SQLCA.

User response

Remove the clause. You might need to use a cursor to perform the processing. The ORDER and FOR UPDATE clauses are accepted on the DECLARE CURSOR statement. The INTO clause is accepted on the FETCH statement. The LARGE clause is accepted on a CREATE TABLESPACE statement with the NUMPARTS option.

Severity

8 (error)

Related reference

Statements (Db2 SQL)

DSNH110I **E *csectname* INVALID HEXADECIMAL CONSTANT BEGINNING *constant***

Explanation

The string constant that begins with the specified *string* is invalid because it has at least one of the following errors:

- the string constant contains one or more characters that are not valid hexadecimal digits
- the string constant does not have an even number of digits
- for a UX or GX string constant, the number of digits is not a multiple of 4

System action

If the containing SQL statement is a declaration, it is discarded. If the containing SQL statement is executable, it is replaced by host language statements that will, if executed, set an error code in the SQLCA.

User response

Correct the string constant.

Severity

8 (error)

DSNH111W **W *csectname* LINE *nnnn* COL *cc* THE SUBPAGES OPTION IS NOT SUPPORTED FOR TYPE 2 INDEXES**

Explanation

You cannot use the SUBPAGES option for type 2 indexes.

System action

The option is ignored; processing continues.

Programmer response

Remove the SUBPAGES option to get rid of the warning.

Severity

4 (warning)

DSNH113I **E *csectname* LINE *nnnn* COL *cc* INVALID CHARACTER FOUND IN *string*, REASON CODE - *nnn***

Explanation

The string contains an invalid character. It can be an SQL ordinary identifier name, a host variable name, or a DBCS comment.

Certain SQL identifiers (for example names of buffer pools, databases, and plans) must contain only uppercase alphabetic or national characters and numerics; the first character must be alphabetic or national.

The following reason codes apply to SBCS identifiers:

000
An invalid character was found in the SBCS identifier (including the case in which a DBCS identifier was used where only an SBCS identifier is allowed).

The following reason codes apply to DBCS identifiers or comments:

101
An odd number of bytes exists between the shift-out and the shift-in character.

102
Either a shift-in or shift-out character is missing.

103
DBCS blanks X'4040' are not allowed.

104
There are no characters between the shift-out and the shift-in characters.

105
Shift-out cannot be the first byte of the DBCS character between the shift-out and the shift-in characters.

System action

Processing is terminated.

User response

Correct the name.

Severity

8 (error)

DSNH115I **E *csectname* LINE *nnnn* COL *cc* ILLEGAL USE OF COMPARISON OPERATOR *operator***

Explanation

The syntax is not correct for this type of comparison. A simple comparison such as '>' must not be followed by a list of items. The ANY and ALL comparisons must precede a subselect, rather than an expression or a list of items.

System action

If the containing SQL statement is a declaration, it is discarded. If the containing SQL statement is

executable, it is replaced by host language statements that will, if executed, set an error code in the SQLCA.

User response

Correct the syntax.

Severity

8 (error)

Related reference

Statements (Db2 SQL)

DSNH117I **E *csectname* LINE *nnnn* COL *cc* STATEMENT INSERTS THE WRONG NUMBER OF VALUES**

Explanation

The number of entries in a value-list is not the same as the number of columns specified in an INSERT statement.

System action

Processing continues.

User response

Correct the syntax.

Severity

8 (error)

Related reference

Statements (Db2 SQL)

DSNH120I **E *csectname* LINE *nnnn* COL *cc* FUNCTION USAGE NOT PERMITTED: *fname***

Explanation

A WHERE clause or SET clause contains an aggregate function, possibly as a result of a reference to a column that is derived from an aggregate function in a view definition. An aggregate function is allowed in a WHERE clause only if that clause appears within a subquery of a HAVING clause.

System action

If the containing SQL statement is a declaration, it is discarded. If the containing SQL statement is executable, it is replaced by host language statements that will, if executed, set an error code in the SQLCA.

User response

Correct the syntax. A subselect clause might be needed to produce the function result.

Severity

8 (error)

Related concepts

Queries (Db2 SQL)

Related reference

subselect (Db2 SQL)

DSNH125I **E *csectname* LINE *nnnn* COL *cc* INVALID ORDER BY COLUMN NUMBER: *number***

Explanation

The identified column number is either less than 1 or greater than the number of items in the select-list.

System action

The cursor declaration is discarded.

User response

Correct the column number.

Severity

8 (error)

Related concepts

Queries (Db2 SQL)

DSNH126I **E *csectname* LINE *nnnn* COL *cc* ORDER BY CANNOT BE USED WITH A FOR UPDATE OF CLAUSE**

Explanation

The ORDER BY clause makes the cursor incapable of being updated.

System action

The cursor declaration is discarded.

User response

This is a Db2 restriction. You can have either an ordered cursor or a cursor that can be updated. You cannot specify both attributes for the same cursor. You might need to change your application logic.

Severity

8 (error)

DSNH129I **E *csectname* LINE *nnnn* COL *cc* TOO MANY TABLES SPECIFIED IN SQL STATEMENT**

Explanation

In a subselect, (including all subqueries), there can be no more than 225 references to table names.

System action

If the containing SQL statement is a declaration, it is discarded. If the containing SQL statement is executable, it is replaced by host language statements that will, if executed, set an error code in the SQLCA.

User response

Reduce the number of table references in each subselect. Each reference to a single table counts separately. The count only applies to table/view references in the FROM list. Each view is only counted one time.

Severity

8 (error)

Related reference

subselect (Db2 SQL)

from-clause (Db2 SQL)

Limits in Db2 for z/OS (Db2 SQL)

DSNH130I **E *csectname* LINE *nnnn* COL *cc* THE ESCAPE CLAUSE '*x*' CONSISTS OF MORE THAN ONE CHARACTER**

Explanation

The literal *x* used in the ESCAPE clause is too long. Only one SBCS or one DBCS character is allowed.

System action

The corresponding SQL statement is replaced by host language statements that will, if executed, set an error code in the SQLCA.

User response

Correct the string. The literal string for the ESCAPE clause can only be one SBCS or DBCS character.

Severity

8 (error)

DSNH131I **E *csectname* LINE *nnnn* STATEMENT WITH LIKE PREDICATE HAS INCOMPATIBLE DATA TYPES**

Explanation

If the column name at the left of LIKE or NOT LIKE is a character type, the expression at the right must be a character type. If the column name is a graphic type, the expression at the right must be a graphic type.

System action

The statement is ignored.

User response

Check the data type of every operand.

Severity

8 (error)

DSNH132I **E *csectname* LINE *nnnn* COL *cc* INVALID LIKE PREDICATE**

Explanation

The value following LIKE must be an alphanumeric host variable or literal, graphic host variable or literal, or special character literal.

System action

If the containing SQL statement is a declaration, it is discarded. If the containing SQL statement is executable, it is replaced by host language statements that will, if executed, set an error code in the SQLCA.

User response

Correct the syntax of the LIKE predicate.

Severity

8 (error)

Related concepts

Language elements (Db2 SQL)

Related reference

LIKE predicate (Db2 SQL)

DSNH142I **E *csectname* LINE *nnnn* COL *cc* THE SQL STATEMENT IS NOT SUPPORTED**

Explanation

The *token* was found. An SQL statement was detected that is not supported by the database. The statement might be valid for other IBM relational database

products or it might be valid in another context. For example, statements such as VALUES and SIGNAL SQLSTATE can appear only inside a trigger.

System action

The SQL statement is replaced by host language statements that will, if executed, set an error code in the SQLCA.

User response

Change the syntax of the SQL statement or remove the statement from the program.

Severity

8 (error)

DSNH170I **E *csectname* LINE *nnnn* COL *cc* NUMBER OF ARGUMENTS SPECIFIED FOR *function-name* IS INVALID**

Explanation

An SQL statement specified the scalar function *function-name* with either too many or too few arguments.

System action

If the containing SQL statement is a declaration, it is discarded. If the containing SQL statement is executable, it is replaced by host language statements that, if executed, sets an error code in the SQLCA.

User response

Correct the function call.

Severity

8 (error)

Related reference

Scalar functions (Db2 SQL)

DSNH171I **E *csect-name* LINE *nnnn* COL *cc* THE DATATYPE, LENGTH, OR VALUE OF ARGUMENT *nn* OF *function-name* IS INVALID**

Explanation

The data type, length, or value of the argument *nn* of a *function-name* scalar function is incorrect.

System action

If the containing SQL statement is a declaration, it is discarded. If the containing SQL statement is executable, it is replaced by host language statements that, if executed, sets an error code in the SQLCA.

User response

Correct the argument.

Severity

8 (error)

Related reference

Scalar functions (Db2 SQL)

DSNH182I **E *csectname* LINE *nnnn* COL *cc* AN ARITHMETIC EXPRESSION WITH A DATETIME VALUE IS INVALID**

Explanation

The specified arithmetic expression contains an improperly used date/time value or labeled duration.

System action

If the containing SQL statement is a declaration, it is discarded. If the containing SQL statement is executable, it is replaced by host language statements that will, if executed, set an error code in the SQLCA.

User response

Correct the indicated expression.

Severity

8 (error)

Related concepts

Date arithmetic (Db2 SQL)
Time arithmetic (Db2 SQL)
Timestamp arithmetic (Db2 SQL)

DSNH184I **E *csectname* LINE *nnnn* COL *cc* AN ARITHMETIC EXPRESSION WITH A DATETIME VALUE CONTAINS A PARAMETER MARKER**

Explanation

The specified expression contains a parameter marker improperly used with a date/time value.

System action

If the containing SQL statement is a declaration, it is discarded. If the containing SQL statement is

executable, it is replaced by host language statements that will, if executed, set an error code in the SQLCA.

User response

Correct the indicated expression.

Severity

8 (error)

Related concepts

Date arithmetic (Db2 SQL)
Time arithmetic (Db2 SQL)
Timestamp arithmetic (Db2 SQL)

DSNH198I **E *csectname* LINE *nnnn* COL *cc* EMPTY SQL STATEMENT IGNORED**

Explanation

The referenced SQL statement has no text between the EXEC SQL and the statement terminator.

System action

The statement is ignored.

User response

Correct the statement, or remove it.

Severity

8 (error)

DSNH199I **E *csectname* LINE *nnnn* COL *cc* INVALID KEYWORD *keyword*; VALID SYMBOLS ARE: *token list***

Explanation

A syntax error was detected at the keyword specified in the message. As an aid to the programmer, a partial list of valid tokens is provided in the message. Only those tokens that fit are listed. The error might be earlier in the statement, but the syntax of the statement appears to be valid up to this point.

System action

If the containing SQL statement is a declaration, it is discarded. If the containing SQL statement is executable, it is replaced by host language statements that will, if executed, set an error code in the SQLCA.

User response

Check the SQL statement in the area of the indicated keyword. A colon or SQL delimiters might be missing. Correct the SQL statement.

Severity

8 (error)

DSNH203I **W *csectname* LINE *nnnn* COL *cc* STATEMENT REFERENCES COLUMN *column name*, WHICH IS DECLARED IN MORE THAN ONE OF THE SPECIFIED TABLES**

Explanation

The column *column name* was referenced without sufficient qualification. Type checking cannot be done.

System action

Processing continues.

User response

If the table declares are correct and the column name is not unique, this creates an error in the BIND step. Correct the DECLARE TABLE statement, or use the correct table name to qualify the column name.

Severity

4 (warning)

DSNH204I **W *csectname* LINE *nnnn* COL *cc* STATEMENT REFERENCES UNDECLARED TABLE *table-name***

Explanation

The table definition was not provided. It is optional, but checking cannot be done without the table information. (BIND checks against the actual table during later processing.)

System action

Processing continues.

Severity

4 (warning)

DSNH205I **W *csectname* LINE *nnnn* COL *cc* COLUMN *column-name* WAS NOT DECLARED IN TABLE *table-name***

Explanation

The column name *column-name* is not contained in the table declarations. The name specified in a DISTINCT function must reference a column of the table. The value expression of an ALL function must reference a column of the table.

System action

Processing continues.

User response

If the table declares are correct and the column name is not in the table, this creates an error in the BIND step. Correct the DECLARE TABLE statement or the column name.

Severity

4 (warning)

DSNH206I **W *csectname* LINE *nnnn* COL *cc* STATEMENT REFERENCES COLUMN *column name* WHICH IS NOT DECLARED IN THE SPECIFIED TABLE(S)**

Explanation

The column *column name* is not contained in any TABLE declaration for the tables specified in the statement.

System action

Processing continues.

System programmer response

Check the spelling of the column name. Ensure that all the tables needed were specified in the statement.

User response

If the table declares are correct and the column name is not in the tables, this creates an error in the BIND step. Correct the DECLARE TABLE statements or the column name.

Severity

4 (warning)

DSNH207I **E *csectname* LINE *nnnn* COL *cc* ILLEGAL ORDERBY SPECIFICATION**

Explanation

If the select expression involves a UNION operator, the ORDER BY list must use numeric constants rather than variables.

System action

If the containing SQL statement is a declaration, it is discarded. If the containing SQL statement is executable, it is replaced by host language statements that will, if executed, set an error code in the SQLCA.

User response

Correct the syntax.

Severity

8 (error)

Related concepts

Queries (Db2 SQL)

Related reference

order-by-clause (Db2 SQL)

fullselect (Db2 SQL)

DSNH251I **E *csectname* LINE *nnnn* COL *cc* TOKEN *name* IS NOT VALID**

Explanation

The location name cannot contain alphabetic extenders for national languages (that is, #, @, and $ in the United States).

System action

Processing continues.

User response

Correct the content of the location name.

Severity

8 (error)

DSNH270I **FUNCTION NOT SUPPORTED**

Explanation

The statement cannot be processed because it violates one or more of the following restrictions:

- DESC is not allowed in CREATE INDEX if the index is an XML index or expression-based index.
- RANDOM is not allowed in CREATE INDEX if the index is an XML index or expression-based index.

- STACKED is not allowed on GET DIAGNOSTICS for external SQL procedures
- A FETCH statement cannot include WITH CONTINUE or CURRENT CONTINUE within an SQL routine.
- The only options allowed for ALTER FUNCTION ALL VERSIONS are SECURED and NOT SECURED. Any other option is flagged with an error.

System action

The statement cannot be processed.

User response

Correct the violation and issue the statement again.

Severity

8 (error)

DSNH290I **E *csectname* LINE *nnnn* COL *cc* NO VALID 'END DECLARE SECTION' FOUND**

Explanation

The user's source program contains a BEGIN DECLARE SECTION, but no corresponding END DECLARE SECTION was found.

System action

Processing continues.

User response

Check the application program and ensure that a valid END DECLARE SECTION statement is present.

Severity

8 (error)

DSNH291I **E *csectname* LINE *nnnn* COL *cc* NO VALID 'BEGIN DECLARE SECTION' FOUND**

Explanation

The user's source program contains an END DECLARE SECTION, but no corresponding BEGIN DECLARE SECTION was found.

System action

Processing continues.

User response

Check the application program and ensure that a valid BEGIN DECLARE SECTION is present.

Severity

8 (error)

DSNH292I **E *csectname* LINE *nnnn* COL *cc* HOST NAME *name* IS TOO LONG; MAXIMUM IS *size* CHARACTERS**

Explanation

Fully qualified C host variable names cannot contain more than 256 characters.

System action

If the containing SQL statement is executable, it is replaced by host language statements that will, if executed, set an error code in the SQLCA.

User response

Reduce the length of names or the level of qualification of the host variable name in error.

Severity

8 (error)

DSNH303I **W *csectname* LINE *nnnn* COL *cc* STATEMENT SELECTS INCOMPATIBLE DATA TYPE INTO *hostvar***

Explanation

The data type of host variable *hostvar* is not compatible with the apparent type of the corresponding select expression. One of them is numeric and the other is character, or one of them is character and the other is graphic. If the select expression is a column reference, the data type is obtained from its declaration.

System action

Processing continues.

System programmer response

Ensure that the table definitions are current, and that the host variable has the proper data type.

User response

Ensure that the table definitions are current and that the host variable has the proper data type.

Severity

4 (warning)

DSNH310I **W *csectname* LINE *nnnn* COL *cc* *language* HOST VARIABLE *name* WAS DECLARED IN *location***

Explanation

Host variable *name* should not be declared in this *location* of the source program. This message is issued only at reference time.

System action

Processing continues.

User response

If this host variable is used, the user assumes responsibility for possible exposure of incorrect output.

Declaring a COBOL host variable in the File Section might lead to incorrect output from SQL statements or abend 04E with RC=00E7000C.

Severity

4 (warning)

Related concepts

Host variables (Db2 Application programming and SQL)

Related tasks

Declaring host variables and indicator variables (Db2 Application programming and SQL)

Related information

00E7000C (Db2 Codes)

DSNH312I **E *csect-name* LINE *line-number* COL *column-number* UNDEFINED OR UNUSABLE HOST VARIABLE *variable-name***

Explanation

A problem occurred with the specified variable in an SQL statement. Either no declaration was found in the application program before the statement, or the attributes of the variable are improper for the intended use.

csect-name
The name of the control section that issued the message.

line-number
The line number in the source code of the application program.

column-number
The numeric representation of the column. The first column is identified as column 1, the second as column 2, and so on.

variable-name
The name of the variable that caused the error.

This message is issued only at reference time.

System action

If the SQL statement that contains the variable is a declaration, it is discarded.

If the SQL statement that contains the variable is executable, it is replaced by host language statements that, if executed, set an error code in the SQLCA.

User response

Check the declaration and the attributes of the named host variable. If you intended the name to refer to a column, the colon (:) must not be present. If you intended a literal, enclose the value in string delimiters (apostrophes or quotation marks).

If you intended to use a host variable, only a subset of the possible variable declarations are valid for use as a Db2 host variable. See the information about rules for host variables in an SQL statement.

To determine the source of the problem, use the cross-reference listing and the source listing to determine whether any of the following situations apply:

- If you use the STDSQL(YES) SQL processing option, make sure that all of the host variable declarations are declared within the BEGIN DECLARE SECTION and the END DECLARE SECTION.
- If the cross-reference listing does not contain the host variable name, the declaration is missing. If the source for a declaration is present, a missing terminator from a comment or from a string might cause this type of error. The margin settings might also cause this type of error.
- If the name is present, but the data type is not listed, the host variable is not usable; it does not follow the rules for valid host variable definitions.
- If several definitions exist for the name, the first reference might occur before the definition. In this situation, the TWOPASS SQL processing option helps by processing DECLARE statements before the other types of statements. However, host variable declarations and cursor declarations are processed in the same pass. The host variables that are referenced in cursor declarations must be defined before the cursor is defined in the application program. This rule applies regardless of whether the

ONEPASS or TWOPASS SQL processing option is used.

- A parameter marker is expected rather than a host variable in an EXECUTE IMMEDIATE statement.
- The data type of a host variable that is passed in a CALL statement is not CHAR or VARCHAR.
- The length attribute of a CHAR or VARCHAR host variable that is passed in a CALL statement exceeds 255 characters.
- If you are using the precompiler for COBOL, check whether the named host variable is declared in a structure that contains FILLER elements. The FILLER elements might invalidate the variables in the structure.

Severity

8 (error)

Related concepts

Using host variables in SQL statements (Db2 Application programming and SQL)

Output from the Db2 precompiler (Db2 Application programming and SQL)

Related tasks

Collecting data for Db2 precompiler and Db2 coprocessor problems (Collecting data)

Related reference

Descriptions of SQL processing options (Db2 Application programming and SQL)

EXECUTE IMMEDIATE (Db2 SQL)

DECLARE CURSOR (Db2 SQL)

CALL (Db2 SQL)

Host structures in COBOL (Db2 Application programming and SQL)

DSNH313I E *csect-name* LINE *nnnn* COL *cc* INVALID TYPE OR LENGTH OF HOST VARIABLE '*variable-name*'

Explanation

The host variable *variable-name* is used in an SQL statement, but either the type or the length is improper for this use.

System action

The corresponding SQL statement is replaced by host language statements that will, if executed, set an error code in the SQLCA.

User response

Check the declaration and the attributes of the named host variable.

Severity

8 (error)

Related concepts

Compatibility of SQL and language data types (Db2 Application programming and SQL)

Related tasks

Declaring host variables and indicator variables (Db2 Application programming and SQL)

DSNH314I E *csectname* LINE *nnnn* COL *cc* REFERENCE TO HOST VARIABLE *name* IS AMBIGUOUS

Explanation

The host variable *name* was defined more than once in this application program. The precompiler cannot distinguish which host variable definition should be used here. The following table indicates some possible combinations. Db2 supports only a single adjacent qualifier for a host variable name.

Case	Ref	Definition	Result	Suggested Change
1	a	x.a	Valid	None
2	x.a	x.a, y.a	Valid	None
3	a	x.a, y.a	DSNH314I	Reference x.a or y.a
4	a	x.a, a	Valid	None
5	x.a	q.x.a, v.x.a	No precompiler error, but host language compiler will issue an error.	Variable name changes
6	a	a, a	No precompiler error, but host language compiler will issue an error.	Variable name changes

System action

If the SQL statement is a declaration, it is discarded. If the containing SQL statement is executable, it is replaced by host language statements that will, if executed, set an error code in the SQLCA.

User response

Make the host variable name unique or use qualification to indicate which host variable definition is to be used, as suggested in the above table.

Severity

8 (error)

DSNH330I **E *csect-name* LINE *line-number* COL *column-number* TEXT COULD NOT BE CONVERTED TO CCSID 1208, REASON *reason-code***

Explanation

Db2 parses SQL statements in Unicode UTF-8 (CCSID 1208). The Db2 precompiler or coprocessor will convert the application program internally (not externally) from the application source EBCDIC CCSID to UTF-8 for processing. This message indicates that text from the application program could not be converted.

csect-name
The name of the control section that issued the message.

reason-code
The reason for the message or SQL code, indicated by one of the following values:

012
A character to be converted is an invalid code-point.

016
The string to be converted does not conform to the rules for valid data. For example, this could be a mismatch between shift-in and shift-out, or by the absence of half of a DBCS character.

System action

The statement is discarded.

Programmer response

Take the appropriate action for the *reason-code* value:

012
Change the text in the application program to a valid code point.

016
Change the text in the application program to conform to the rules for well-formed mixed data.

Severity

8 (error)

DSNH331I **W *csectname* LINE *nnnn* COL *cc*. SUBSTITUTION OCCURRED ON CONVERSION FROM CCSID *from-ccsid* TO *to-ccsid***

Explanation

During conversion of the source text into UTF-8 (CCSID1208), a character was encountered that resulted in a substitution character of either '3F'x (in EBCDIC code pages), or '1A'x (in UTF-8).

System action

Processing of the statement continues.

User response

Review the character that was converted to determine if the substitution character '3F'x is correct. If it is correct, the message can be ignored. Otherwise, change the character to the correct code point.

Severity

4 (warning)

DSNH332I **U *csect-name* CHARACTER CONVERSION FROM CCSID *ccsid-1* TO CCSID *ccsid-2* IS NOT SUPPORTED, REASON *reason-number***

Explanation

Db2 parses SQL statements in Unicode UTF-8 (CCSID 1208). The Db2 precompiler or coprocessor will convert the application program internally (not externally) from the application source EBCDIC CCSID to UTF-8 for processing. In some cases, Db2 also converts portions from UTF-8 back to the source EBCDIC CCSID. This message indicates that the conversion could not take place.

csect-name
The name of the control section that issued the message.

ccsid-1
The original CCSID.

ccsid-2
The target CCSID.

reason-number
The reason for the message, indicated by one of the following values:

000
An invalid CCSID was specified on the CCSID option.

001
No conversion is defined from the original CCSID to the target CCSID

System action

The precompiler or coprocessor is terminated.

System programmer response

Make sure that the Unicode System Services conversion image includes the required conversions.

User response

Check that the value of the CCSID option is valid. Run the precompilation again with a valid CCSID if you do not want to use the EBCDIC system CCSID.

Severity

16 (unrecoverable error)

Related concepts

z/OS Unicode Services User's Guide and Reference

DSNH350I **E *csect-name column-name* WAS IMPLICITLY OR EXPLICITLY REFERENCED IN A CONTEXT IN WHICH IT CANNOT BE USED**

Explanation

The ALTER, CREATE, or DECLARE TEMPORARY TABLE statement is invalid for one of the following reasons:

DECFLOAT columns
A DECFLOAT column cannot be:

- Specified as a column of the primary key in a PRIMARY KEY clause.
- Specified as a column of a UNIQUE KEY.
- Specified as a column of a foreign key in a *referential-constraint* clause.
- Specified as a column of a parent key in a REFERENCES clause.
- Specified as a column of a partitioning key for range partitioning.
- Defined in a table that has an EDITPROC.
- Specified as a column of an index key. Additionally, the result data type, including the intermediate result, of a key expression for an index cannot be a DECFLOAT data type or a distinct type based on a DECFLOAT data type. For an XML index, only XML columns can be specified, and the result type of the index key can be DECFLOAT.

LOB columns
A LOB column cannot be:

- Specified as a column of the primary key in a PRIMARY KEY clause.
- Specified as a column of a UNIQUE KEY.
- Specified as a column of a foreign key in a *referential-constraint* clause.
- Specified as a column of a parent key in a REFERENCES clause.
- Specified as a column of a partitioning key for range partitioning.
- Defined in a temporary table (created global temporary table or declared global temporary table).
- Defined in a table that has an EDITPROC.
- Specified as a column of an index key
- The result data type, including the intermediate result, of a key expression for an index (this includes distinct types that are based on a LOB).
- The data type of a column in the result table of an *as-result-table* clause of a CREATE TABLE or DECLARE GLOBAL TEMPORARY TABLE statement.
- Defined in a table that has an edit procedure that is defined with row attribute sensitivity.

security label columns
A security label column cannot be:

- Specified as a column of a foreign key in a *referential-constraint* clause.
- Specified as a column of a parent key in a REFERENCES clause.
- Specified in a key expression for an index.

A security label column *column-name* exists in the result table of the *as-result-table* clause; however, it is not the only security label column in that result table. A table can be defined only with a single security label column.

XML columns
An XML column cannot be:

- Specified as a column of the primary key in a PRIMARY KEY clause.
- Specified as a column of a UNIQUE KEY.
- Specified as a column of a foreign key in a *referential-constraint* clause.
- Specified as a column of a parent key in a REFERENCES clause.
- Specified as a column of a partitioning key for range partitioning.

- Defined in a temporary table (created global temporary table or declared global temporary table).
- Defined in a table that has an EDITPROC.
- Specified as a column of an index key
- The result data type, including the intermediate result, of a key expression for an index.
- The data type of a column in the result table of an *as-result-table* clause of a CREATE TABLE or DECLARE GLOBAL TEMPORARY TABLE statement.
- Defined in a table that has an edit procedure that is defined with row attribute sensitivity.

hidden columns
A hidden column cannot be specified in a key expression for an index.

ROWID columns
A ROWID column cannot be the data type of a column in the result table of an *as-result-table* clause of a CREATE TABLE or DECLARE GLOBAL TEMPORARY TABLE statement.

System action

The statement cannot be processed.

User response

Correct the syntax, and reissue the statement.

Severity

8 (error)

DSNH372I **E *csectname* ONLY ONE ROWID, ROW CHANGE TIMESTAMP, SECURITY LABEL OR IDENTITY COLUMN IS ALLOWED IN A TABLE**

Explanation

An attempt was made to do one of the following actions:

- Create a table with more than one ROWID column.
- Add a ROWID column to a table that already has one.
- Create a table with more than one identity column.
- Add an identity column to a table that already has one.
- Add a security label column to a table that already has one.
- Create a table with more than one security label column.
- Create a table with more than one row change timestamp column.
- Add a row change timestamp column to a table that already has one.
- Create a table without a security label in the Common Criteria environment which requires a security label column on every table created.

System action

The statement cannot be executed.

User response

For a CREATE TABLE statement, select only one column to have the row ID data type, the IDENTITY attribute, the SECURITY LABEL attribute, or the row change timestamp attribute. For an ALTER TABLE statement, a ROWID column, identity column, or security label column already exists for the table. Do not attempt to add another column with the data type row ID, with the AS IDENTITY attribute or the AS SECURITY LABEL to the table. If the Common Criteria environment is set (DSN6SPRM COMCRIT= YES), then every table created must have a security label. Designate a column AS SECURITY LABEL or change the subsystem parameter.

Severity

8 (error)

DSNH385I **ASSIGNMENT TO AN SQLSTATE OR SQLCODE VARIABLE IN AN SQL PROCEDURE *routine-name* MAY BE OVER-WRITTEN AND DOES NOT ACTIVATE ANY HANDLER**

Explanation

SQL routine *routine-name* was created, but it contains an assignment statement that specifies the SQLCODE or SQLSTATE variable as the target. Assignment to an SQLSTATE or SQLCODE variable in an SQL routine only changes the value in the variable, and does not activate any handler. The SQLSTATE and SQLCODE variables are assigned values by processing of SQL statements in the SQL routine. Therefore, any value assigned might be over-written as a result of SQL statement processing.

System action

The routine definition is processed successfully.

Programmer response

No recovery is necessary. If the intent was to signal an error or warning, specify the SIGNAL or RESIGNAL statement instead of the assignment. To prevent this warning, remove any assignments to the SQLSTATE or SQLCODE special variables.

Severity

4 (warning)

DSNH401I **W *csectname* LINE *nnnn* COL *cc* STATEMENT SPECIFIES INCOMPATIBLE OPERANDS FOR COMPARISON OPERATOR *name***

Explanation

The comparison operation *name* is used with a mixture of incompatible data type operands.

System action

Processing continues.

User response

Make both operands compatible character data types. Ensure that the table declaration is correct.

Severity

4 (warning)

DSNH402I **W *csectname* LINE *nnnn* COL *cc* STATEMENT APPLIES *name* TO CHARACTER DATA**

Explanation

The numeric operation or function *name* is used with a non-numeric operand.

System action

Processing continues.

User response

Make the operand numeric or use a character function. Ensure that the table declaration is correct.

Severity

4 (warning)

DSNH405I **E *csectname* THE NUMERIC CONSTANT *constant* CANNOT BE USED AS SPECIFIED BECAUSE IT IS OUT OF RANGE**

Explanation

The numeric *constant* is not in the proper range.

The proper ranges for SQL values are as follows:

- 5.4E-79 to 7.2E+75 for FLOAT values
- $-(10^{31} -1)$ to $+(10^{31} -1)$ for DECIMAL values
- -2147483648 to 2147483647 for INTEGER values
- -32768 to +32767 for small integer (SMALLINT) values
- $-9.999999999999999 \times 10^{-383}$ to $9.999999999999999 \times 10^{384}$ for DECFLOAT(16) values
- $-9.999999999999999999999999999999999 \times 10^{-6143}$ to $9.999999999999999999999999999999999 \times 10^{6144}$ for DECFLOAT(34) values
- - 9223372036854775808 to +9223372036854775807 for big integer (BIGINT) values

System action

If the containing SQL statement is a declaration, it is discarded. If the containing SQL statement is executable, it is replaced by host language statements that will, if executed, set an error code in the SQLCA.

User response

Correct the number.

Severity

8 (error)

DSNH408I **W *csectname* LINE *nnnn* COL *cc* STATEMENT INSERTS OR UPDATES COLUMN *column-name* WITH INCOMPATIBLE DATA TYPE**

Explanation

The data type of the value to be inserted into a column by an INSERT or UPDATE statement is incompatible with the declared data type of the column.

csect-name
The name of the control section that issued the message.

nnnn
The line number that is generated for DSNH messages. For more information about these line numbers, see “Message line numbers” on page 161.

cc
The location of the source column. For more information about the *cc* value, see "Message line numbers" on page 161.

column-name
The name of the column into which you are trying in insert data.

System action

Processing continues.

Programmer response

Ensure that the table definitions are current. Also, ensure that host variables and literals have the proper data types for the target column.

Severity

4 (warning)

Related concepts
Compatibility of SQL and language data types (Db2 Application programming and SQL)
Related tasks
Declaring table and view definitions (Db2 Application programming and SQL)

DSNH414I **E *csectname* LINE *nnnn* COL *cc* THE NUMERIC OR DATETIME COLUMN *column-name* IS SPECIFIED IN A LIKE PREDICATE**

Explanation

Column *column-name* with a numeric data type was specified in a LIKE predicate. Columns specified in a LIKE predicate must be character or graphic string columns.

System action

If the containing SQL statement is a declaration, it is discarded. If the containing SQL statement is executable, it is replaced by host language statements that will, if executed, set an error code in the SQLCA.

User response

Correct the statement.

Severity

8 (error)

DSNH434I **OPTION *keyword* IS A DEPRECATED FEATURE**

Explanation

keyword is a deprecated feature that will not be supported in releases following Db2 11. It is supported, but it is best to discontinue the use of this keyword.

For indexes, we recommend that you use type 2 indexes rather than type 1 indexes.

System action

Processing continues normally.

User response

No change is required for the current release. However, we recommend that you change your SQL statement to remove this feature to prepare for future releases when this feature is not supported.

Severity

4 (warning)

DSNH435I **E *csectname* AN INVALID SQLSTATE *sqlstate* IS SPECIFIED IN A RAISE_ERROR FUNCTION, RESIGNAL STATEMENT, OR SIGNAL STATEMENT**

Explanation

The SQLSTATE specified in the RAISE_ERROR function, RESIGNAL statement, or SIGNAL statement of a trigger or a routine does not conform to the rules for a valid SQLSTATE.

System action

The statement cannot be processed.

User response

Correct the SQLSTATE specified in the RAISE_ERROR function or SIGNAL or RESIGNAL statement. The SQLSTATE must be a character string containing exactly 5 characters. It must be of type CHAR defined with a length of 5, or a type VARCHAR defined with a length of 5 or greater. The SQLSTATE value must follow the rules for application-defined SQLSTATEs as follows:

- Each character must be from the set of digits ('0' through '9') or non-accented upper case letters ('A' through 'Z').
- The SQLSTATE class (first two characters) cannot be '00' since this represents successful completion.

Severity

8 (error)

DSNH449I **W *csectname* LINE *nnnn* COL *cc* CREATE FUNCTION OR PROCEDURE FOR *routine-name* CONTAINS AN INVALID FORMAT OF THE EXTERNAL NAME CLAUSE OR IS MISSING THE EXTERNAL NAME CLAUSE**

Explanation

An error was found in the EXTERNAL NAME clause of the CREATE FUNCTION or CREATE PROCEDURE statement for *name*, or the clause is needed but was not specified. See SQLCODE -449 for specific information about rules for LANGUAGE JAVA.

System action

The corresponding SQL statement is replaced by host language statements that will, if executed, set an error code in the SQLCA.

User response

Correct the syntax of the CREATE or ALTER statement for the function or procedure.

Severity

8 (error)

Related reference

ALTER FUNCTION (external) (Db2 SQL)

ALTER PROCEDURE (external) (Db2 SQL)

CREATE FUNCTION (external scalar) (Db2 SQL)

CREATE PROCEDURE (SQL - external) (Db2 SQL)

Related information

-449 (Db2 Codes)

DSNH451I **THE *data-item* DEFINITION IN THE CREATE OR ALTER STATEMENT FOR *routine-name* CONTAINS DATA TYPE *type* WHICH IS NOT SUPPORTED FOR THE TYPE AND LANGUAGE OF THE ROUTINE**

Explanation

An error was found in the *data-item* part of the CREATE or ALTER statement for *routine-name*. The statement contained an invalid data type, or it contained a distinct type which is based on the invalid data type.

System action

The statement cannot be processed.

Programmer response

Correct the specification of the routine and reissue the CREATE statement.

Severity

8 (error)

DSNH457I **E *csectname* LINE *nnnn* COL *cc*. A FUNCTION OR DISTINCT TYPE CANNOT BE CALLED *name* SINCE IT IS RESERVED FOR SYSTEM USE.**

Explanation

The user-defined function or distinct type cannot be created or referenced because the name selected is reserved for use by the system.

A number of names used as keywords are reserved for system use. These names may not be used as user-defined functions or distinct-type-names, **even if they are delimited identifiers**. These names are:

```
=          <          >          >=         <=
<>         ¬=         ¬>         ¬<
ALL        AND        ANY        BETWEEN    DISTINCT
EXCEPT     EXISTS     FALSE      FOR        FROM
IN         IS         LIKE       MATCH      NOT
NULL       ONLY       OR         OVERLAPS   SIMILAR
SOME       TABLE      TRUE       TYPE       UNIQUE
UNKNOWN
```

System action

The statement cannot be executed.

User response

Select a name for the function or distinct type that is not reserved for system use.

Severity

8 (error)

DSNH473I **E *csectname* LINE *nnnn* COL *cc*. A USER DEFINED DATA TYPE CANNOT BE CALLED THE SAME NAME AS A SYSTEM PREDEFINED TYPE (BUILT-IN TYPE).**

Explanation

The name of a data type to be created has an unqualified name that is the same as a system-predefined data type. This is not allowed. Adding

delimiters does not make the name valid. The following names are restricted:

BIGINT	DECIMAL	REF
BINARY	DECFLOAT	ROWID
BLOB	DOUBLE	SMALLINT
BOOLEAN	DOUBLE PRECISION	TIME
CHAR	FLOAT	TIMESTAMP
CHAR VARYING	GRAPHIC	VARBINARY
CHARACTER	INT	VARCHAR
CHARACTER VARYING	INTEGER	VARGRAPHIC
CLOB	LONG VARCHAR	XML
DATALINK	LONG VARGRAPHIC	
DATE	NUMERIC	
DBCLOB	REAL	
DEC	ROWID	

System action

The statement cannot be executed.

User response

Correct the statement to use another identifier for the name of the new user-defined type.

Severity

8 (error)

DSNH487I **E *csectname* LINE *nnnn* COL *cc* *object-type object-name* ATTEMPTED TO EXECUTE AN SQL STATEMENT WHEN THE DEFINITION OF THE FUNCTION OR PROCEDURE DID NOT SPECIFY THIS ACTION**

Explanation

SQL procedure *object-name* contains SQL statements, but the SQL procedure definition specifies the NO SQL option.

System action

The SQL statement cannot be executed.

Programmer response

Change the definition of the SQL procedure to allow SQL statements, or remove the failing SQL statement from the SQL procedure.

DSNH490I **E *csectname* LINE: MV.NNNN COL *cc* NUMBER *number* DIRECTLY SPECIFIED IN A SQL STATEMENT IS OUTSIDE THE RANGE OF ALLOWABLE VALUES IN THIS CONTEXT (*minval*, *maxval*)**

Explanation

A number (*number*) was specified that is not valid in the context in which it was specified. The minimum allowed value in this context is *minval*. The maximum allowed value in this context is *maxval*. *n* must be within the range specified by *minval* and *maxval* (*minval* =< *n* =< *maxval*).

System action

The statement was not executed.

User response

Change the value *n* to a valid value in the statement.

Severity

8 (error)

DSNH491I **E *csectname* LINE *nnnn* COL *cc*. CREATE STATEMENT FOR USER-DEFINED FUNCTION *function-name* MUST HAVE A RETURNS CLAUSE, AND EITHER THE EXTERNAL CLAUSE (WITH OTHER REQUIRED KEYWORDS) OR THE SOURCE CLAUSE.**

Explanation

A required clause is missing in the CREATE for function *function-name*. If EXTERNAL was specified, the following must also be specified:

- LANGUAGE
- PARAMETER STYLE

System action

The statement cannot be executed.

User response

Correct and reissue the failing statement.

Severity

8 (error)

DSNH504I **E *csectname* LINE *nnnn* COL *cc* CURSOR *name* WAS NOT DECLARED**

Explanation

Identifier *name* is used as a cursor, but was not declared. The declaration might have been discarded because of errors.

System action

If the containing SQL statement is a declaration, it is discarded. If the containing SQL statement is executable, it is replaced by host language statements that will, if executed, set an error code in the SQLCA.

User response

Correct or add the required cursor declaration.

Severity

8 (error)

DSNH506I **E *csectname* LINE *nnnn* COL *cc* DECLARE CURSOR FOR STATEMENT NAME MUST PRECEDE THE PREPARE STATEMENT FOR THAT STATEMENT NAME**

Explanation

This DECLARE *name* CURSOR statement is preceded by a PREPARE *name* statement. In Db2, declarations must precede action statements. This is not the same as in SQL/DS.

System action

The declaration is noted as being in error and discarded.

User response

Move the DECLARE or PREPARE statement so that they are in the proper order, or specify the TWOPASS option if the host language is PLI, ASM, or C. The TWOPASS option has the precompiler check for declarations on the first pass and avoids this problem.

Severity

8 (error)

DSNH520I **E *csectname* THE OPEN STATEMENT FOR CURSOR cursor-name IS INVALID BECAUSE THE CURSOR WAS DEFINED BY AN ALLOCATE CURSOR STATEMENT**

Explanation

The cursor was not successfully declared, so it was assumed to be defined by an ALLOCATE CURSOR statement. A cursor defined by an ALLOCATE CURSOR statement is open after successful completion of the statement. Attempting to OPEN an allocated cursor is an error.

System action

The statement cannot be executed.

User response

Add or fix the declaration of the cursor. If the cursor is supposed to be defined by an ALLOCATE CURSOR statement then remove the OPEN statement.

Severity

8 (error)

DSNH521I **W *csectname* THE statement FOR CURSOR cursor-name IS ASSUMED TO APPLY TO A DYNAMIC ALLOCATE CURSOR STATEMENT.**

Explanation

A FETCH, CLOSE, or DESCRIBE for an undeclared cursor was issued. The cursor is assumed to be defined using a dynamic ALLOCATE CURSOR statement.

System action

The cursor is assumed to be allocated dynamically.

User response

Ensure that the cursor in the FETCH, CLOSE, or DESCRIBE statement is dynamically allocated.

Severity

4 (warning).

DSNH522I **E *csectname* DESCRIBE CURSOR cursor-name IS INVALID BECAUSE THE CURSOR WAS DEFINED BY A DECLARE CURSOR STATEMENT.**

Explanation

DESCRIBE CURSOR is allowed for cursors defined using the ALLOCATE CURSOR statement.

System action

The statement cannot be executed.

User response

Remove the DESCRIBE CURSOR statement. Issue a DESCRIBE of the statement used to define the declared cursor.

Severity

8 (error).

DSNH527I **WARNING: THE PRECOMPILER OR DB2 COPROCESSOR ATTEMPTED TO USE THE DB2-SUPPLIED DSNHDECP MODULE.**

Explanation

The DSNHDECP module that is supplied by Db2 is being used to run the Db2 precompiler or coprocessor. The precompiler or coprocessor requires site-dependent settings that are specified in the DSNHDECP module that was created when Db2 was installed. The installation-generated DSNHDECP module typically resides in the SDSNEXIT library.

System action

Processing halts.

System programmer response

The following actions are required to enable the DSNH CLIST to load your user-supplied DSNHDECP module rather than the Db2 DSNHDECP module that was supplied by Db2:

1. The JOBLIB or STEPLIB concatenation of any job or TSO userid that calls DSNH needs to allocate the library where the user-supplied DSNHDECP module resides (usually prefix.SDSNEXIT) ahead of the library where the Db2-supplied DSNHDECP module resides (prefix.SDSNLOAD).
2. The DSNH call should include the PCLOAD parameter, and it should be coded as shown here: PCLOAD('*(DSNHPC)').

User response

Check the STEPLIB, JOBLIB, or system link list concatenation used in the Db2 address spaces. To ensure that the proper DSNHDECP module is used, verify that the library that contains the DSNHDECP module that is generated during installation precedes the SDSNLOAD library that contains the DSNHDECP module that was supplied by Db2.

DSNH557I **E *csectname* LINE *nnnn* COL *cc* INCONSISTENT GRANT/REVOKE KEYWORD *keyword*; PERMITTED KEYWORDS ARE *keyword-list***

Explanation

The identified *keyword* is not permitted. The *keyword-list* is a list of the keywords that are permitted in this context. The combination of privileges requested on a GRANT or REVOKE statement is not allowed. The authorities must all be of one type and consistent with the form of GRANT or REVOKE. REVOKE UPDATE (column list) is not allowed; only REVOKE UPDATE is permitted.

System action

The containing SQL statement is replaced by host language statements that will, if executed, set an error code in the SQLCA.

User response

Correct the syntax.

Severity

8 (error)

Related reference

GRANT (Db2 SQL)

REVOKE (Db2 SQL)

Statements (Db2 SQL)

DSNH558I **E *csect-name* LINE *nnnn* COL *ccc* INVALID CLAUSE OR COMBINATION OF CLAUSES ON A GRANT OR REVOKE**

Explanation

"PUBLIC AT ALL LOCATIONS" is invalid for non-table privilege GRANT or REVOKE statements. It is also invalid for table privilege GRANT or REVOKE statements that specify the ALTER or INDEX privilege.

System action

The statement cannot be executed.

User response

Correct the syntax.

Severity

8 (error)

Related reference
GRANT (Db2 SQL)
REVOKE (Db2 SQL)
Statements (Db2 SQL)

DSNH562I THE SPECIFIED PRIVILEGES CANNOT BE GRANTED TO PUBLIC.

Explanation

The GRANT statement attempted to grant one of the following privileges to the reserved authorization ID PUBLIC (public):

- System DBADM
- DATAACCESS
- ACCESSCTRL
- CREATE_SECURE_OBJECT

These privileges cannot be granted to PUBLIC (public).

System action

The statement is not processed.

Programmer response:
Change the statement to specify a privilege that can be granted to PUBLIC, or specify a grantee other than PUBLIC.

Related reference
GRANT (Db2 SQL)

DSNH577I E *csectname* LINE *nnnn* COL *cc* *object-type object-name* ATTEMPTED TO MODIFY DATA WHEN THE DEFINITION OF THE FUNCTION OR PROCEDURE DID NOT SPECIFY THIS ACTION

Explanation

An SQL procedure contains SQL statements that modify data, but the SQL procedure is defined with the NO SQL, READS SQL DATA, or CONTAINS SQL option.

System action

The SQL statement cannot be executed.

User response

Change the definition of the SQL procedure to allow SQL statements that modify data, or remove the failing SQL statement from the SQL procedure.

Severity

8 (error)

DSNH580I E *csectname* LINE *nnnn* COL *cc* THE RESULT-EXPRESSIONS OF A CASE EXPRESSION CANNOT ALL BE NULL

Explanation

There is a CASE expression in the statement that has all the *result-expressions* (expressions following the THEN and ELSE keywords) coded with the keyword NULL.

System action

The statement was not processed.

Programmer response

Change the CASE expression to include at least one *result-expression* with a keyword other than NULL.

Severity

8 (error)

DSNH581I E *csectname* LINE *nnnn* COL *cc* THE DATA TYPES OF THE RESULT-EXPRESSIONS OF A CASE EXPRESSION ARE NOT COMPATIBLE

Explanation

A CASE expression in the statement has at least one *result-expression* (expressions following the THEN and ELSE keywords) whose data type does not match that of one of the other result-expressions.

System action

The statement was not processed.

Programmer response

Change the CASE expression so that the data types of all of the *result-expressions* are compatible.

Severity

8 (error)

DSNH582I E *csectname* LINE *nnnn* COL *cc* THE SEARCH-CONDITION IN A SEARCHED-WHEN-CLAUSE CANNOT BE A QUANTIFIED PREDICATE, IN PREDICATE, OR AN EXISTS PREDICATE

Explanation

The *search-condition* in a *searched-when-clause* specifies a quantified predicate, an IN predicate or an EXISTS predicate, but is not allowed.

System action

The statement was not processed.

Programmer response

Correct the *search-condition*.

Severity

8 (error)

DSNH585I **W *csectname* LINE *nnnn* COL *cc* DUPLICATE *schema name* SCHEMA NAME**

Explanation

The identified schema name was specified twice in the statement.

System action

The duplicated schema name is ignore.

User response

Remove/correct the duplicate specification.

Severity

4 (error)

DSNH586I **E *csectname* LINE *nnnn* COL *cc*. THE TOTAL LENGTH OF THE CURRENT PATH SPECIAL REGISTER CANNOT EXCEED 254 CHARACTERS.**

Explanation

The CURRENT PATH special register is defined as a VARCHAR(254). The content of the string includes each schema name delimited with double quotes and separated from the next schema name by a comma. The total length of the string of all schema names in the CURRENT PATH cannot exceed 254 characters. A SET CURRENT PATH statement causing this message would exceed this limit.

System action

The statement cannot be executed.

User response

Remove schema names to reduce the total length to fit the 254 character maximum length. If all the schema names are required, it may be necessary to consolidate some user-defined functions so that fewer schema names are required for the CURRENT PATH.

Severity

8 (error)

DSNH587I **A list of item-references are not in the same family.**

Explanation

Each item-reference in the SET assignment statement is either a host-variable or a transition-variable. The list of item-references must be of the same family, meaning if one of the item-references is a transition-variable, then all of the item-references in the list must be a transition-variable. If the statement is used in the triggered action of a CREATE TRIGGER statement, each item-reference must identify a transition variable. If the statement is used in any other context, each item-reference must identify a host variable.

System action

The corresponding SQL statement is replaced by host language statements that will, if executed, set an error code in the SQLCA.

User response

Correct the syntax of the SQL statement and precompile the program again. Refer to the Db2 SQL Reference to information on the SET assignment statement.

Programmer response

Correct the statement and execute it again.

Severity

8 (error)

DSNH590I **E *csectname* LINE *nnnn* COL *cc* NAME *name* IS NOT UNIQUE IN ROUTINE *routine-name***

Explanation

Name *name* is a parameter, SQL variable, condition name, or label in SQL procedure *routine-name*. *name* is not unique.

System action

The statement cannot be processed.

User response

Change the name to make it unique within the routine.

Severity

8 (error)

DSNH599I **W *csectname* LINE *nnnn* COL *cc*. COMPARISON FUNCTIONS ARE NOT CREATED FOR A DISTINCT TYPE BASED ON A LONG STRING DATA TYPE.**

Explanation

Comparison functions are not created for a distinct type based on a long string data type (BLOB, CLOB, DBCLOB, LONG VARCHAR, LONG VARGRAPHIC) since the corresponding function are not available for these built-in data types.

System action

Processing continues.

User response

No action is required.

Severity

4 (warning)

DSNH612I **E *csectname* LINE *nnnn* COL *cc* *column-name* IS A DUPLICATE COLUMN NAME**

Explanation

The CREATE INDEX, CREATE TABLE, CREATE VIEW or ALTER TABLE statement specifies the same 'column-name' for two (or more) columns of the index, table, view, or the UPDATE OF clause of a trigger definition specifies the same column name more than once. Column names must be unique within an index, a table, a view, or in the UPDATE OF clause of a trigger definition. A column cannot be specified in more than one ALTER TABLE clause except if it is specified in an ALTER COLUMN clause and ADD CHECK CONSTRAINT clause.

System action

The statement cannot be executed.

User response

Correct the CREATE statement to specify unique names for each of the columns of the index, table, view, or the columns in the UPDATE OF clause of a trigger definition. Correct the ALTER statement to specify unique names for each of the ALTER COLUMN clauses.

This error can also occur on CREATE TABLE when a column list of a PRIMARY KEY, FOREIGN KEY, or UNIQUE clause contains two or more occurrences of the same column name.

Severity

8 (error)

DSNH628I **E *csectname* LINE *nnnn* COL *cc* MUTUALLY EXCLUSIVE CLAUSES HAVE BEEN SPECIFIED.**

Explanation

Mutually exclusive clauses were specified in one or more ways.

- A *column-definition* value contains both NOT NULL and DEFAULT NULL clauses.
- A *column-definition* value contains both FIELDPROC and DEFAULT clauses.
- A *select-statement* value contains both the *update-clause* and the FOR FETCH ONLY clause.

ALTER FUNCTION or CREATE FUNCTION statements

- A CREATE FUNCTION statement contains both a CAST FROM clause and a SOURCE clause.
- A CREATE FUNCTION statement contains both a SOURCE clause and a RETURNS TABLE clause.
- A CREATE FUNCTION statement contains both a SOURCE clause and a clause used to define an external function (EXTERNAL, LANGUAGE, NO SQL).
- A CREATE FUNCTION or ALTER FUNCTION statement contains a clause other than the CAST FROM clause for external scalar functions.

ALTER INDEX or CREATE INDEX statements

- A CREATE INDEX statement contains both GENERATE KEY USING and a column specified as ASC or DESC.
- A CREATE INDEX statement contains both a GENERATE KEY USING clause, and a column specified as ASC or DESC.
- A CREATE INDEX or ALTER INDEX statement attempted to specify either CLUSTER,

PARTITION BY, or both, for an XML index or an extended index.

- A CREATE INDEX or ALTER INDEX statement attempted to specify either CLUSTER, PARTITION BY, or both, for an XML index or an extended index.

ALTER PROCEDURE or CREATE PROCEDURE statements

- A CREATE PROCEDURE or ALTER PROCEDURE statement attempts to use the NO WLM ENVIRONMENT and PROGRAM TYPE SUB options. When NO WLM ENVIRONMENT is used, then PROGRAM TYPE MAIN must also be used.
- A CREATE PROCEDURE or ALTER PROCEDURE statement attempts to use both NO WLM ENVIRONMENT and either USER or DEFINER for EXTERNAL SECURITY. When NO WLM ENVIRONMENT is used, then PARAMETER STYLE must be either GENERAL or SIMPLE CALL WITH NULLS.
- A CREATE PROCEDURE or ALTER PROCEDURE statement contains both a LANGUAGE REXX clause, and a PARAMETER STYLE DB2SQL or PARAMETER STYLE JAVA clause.

ALTER TABLE statements

- An ALTER TABLE statement contains both a DROP CONSTRAINT clause and either a DROP FOREIGN KEY clause or a DROP CHECK clause.
- An ALTER TABLE statement contains both an ALTER COLUMN clause and a VALIDPROC clause.
- An ALTER TABLE statement contains both an ALTER COLUMN clause and a clause other than the check constraint clause.
- An ALTER TABLE statement contains a clause and one of the following clauses: ADD CLONE, DROP CLONE, RENAME COLUMN, ADD ORGANIZED BY HASH, ALTER ORGANIZATION, or DROP HASH ORGANIZATION. When one of these clauses is specified, no other clause is allowed on the ALTER TABLE statement.

ALTER TABLESPACE or CREATE TABLESPACE statements

- A CREATE TABLESPACE or ALTER TABLESPACE contains both the LOCKPART YES and LOCKSIZE TABLESPACE
- A CREATE TABLESPACE or ALTER TABLESPACE contains both the LOCKPART YES and LOCKSIZE TABLESPACE
- A CREATE TABLESPACE statement contains both the SEGSIZE and NUMPARTS clauses
- A CREATE TABLESPACE statement contains both the SEGSIZE and LARGE clauses.
- A CREATE TABLESPACE statement contains both the SEGSIZE and MEMBER CLUSTER clauses.

CREATE TRIGGER statements

- A CREATE TRIGGER statement specifies more than one correlation name for OLD, NEW, OLD_TABLE, or NEW_TABLE. Each of these correlation specific can appear no more than once in the CREATE TRIGGER statement.

DECLARE CURSOR statements

- A DECLARE CURSOR statement specifies both the WITH RETURN TO CLIENT option and one the following options: WITH RETURN (TO CALLER) or WITHOUT RETURN.

System action

The statement was not processed.

Programmer response

Change the options specified in the statement and reissue the statement.

Severity

8 (error)

DSNH630E **E *csectname* LINE *nnnn* COL *cc* THE WHERE NOT NULL SPECIFICATION IS INVALID FOR TYPE 1 INDEXES**

Explanation

Type 1 indexes cannot be created with the WHERE NOT NULL specification.

System action

The statement cannot be executed.

Programmer response

Either the index must be created as a type 2 index, or the WHERE NOT NULL specification must not be used.

Severity

8 (error)

DSNH637I **E *csectname* LINE *nnnn* COL *cc* DUPLICATE *keyword* KEYWORD**

Explanation

The identified keyword was specified twice in the statement.

System action

If the containing SQL statement is a declaration, it is discarded. If the containing SQL statement is executable, it is replaced by host language statements that will, if executed, set an error code in the SQLCA.

User response

Remove the duplicate specification.

Severity

8 (error)

DSNH643I **A CHECK CONSTRAINT OR THE VALUE OF AN EXPRESSION FOR A COLUMN OF AN INDEX EXCEEDS THE MAXIMUM ALLOWABLE LENGTH**

Explanation

The definition of a check constraint or expression of an index column exceeds the maximum allowable length for one of the following reasons:

- A check constraint exceeded 3800 UTF-8 bytes. Redundant blank spaces are excluded from this limit.
- A value for an expression or an index exceeded 4000 UTF-8 bytes.

System action

The CREATE TABLE or ALTER TABLE statement failed. The statement cannot be executed.

User response

Change the constraint or expression so that it does not exceed the maximum allowable limit. If i is a check constraint, rewrite the check constraint definition so that it is less than 3800 UTF-8 bytes. You might need to divide the check constraint into two or more smaller check constraints.

Severity

8 (error)

DSNH644I **E *csectname* INVALID VALUE SPECIFIED FOR KEYWORD *keyword-name* IN *statement-type* STATEMENT**

Explanation

The value specified for the *keyword-name* parameter in the *statement-type* SQL statement is not a permitted value.

System action

If the SQL statement containing the problem is a declaration, it is discarded. If the SQL statement containing the problem is executable, it is replaced by host language statements that will, if executed, set an error code in the SQLCA.

User response

Correct the statement.

Severity

8 (error)

Related reference

Statements (Db2 SQL)

DSNH683I **E *csectname* LINE *nnnn* COL *cc*. THE SPECIFICATION FOR COLUMN, DISTINCT TYPE, FUNCTION, OR PROCEDURE *data-item* CONTAINS INCOMPATIBLE CLAUSES**

Explanation

There is an error in the data item specification in a statement. Incompatible specifications are present such as "INTEGER and FOR BIT DATA", or "INTEGER AS LOCATOR". The location of the error is given by *data-item* as follows:

- For a CREATE or ALTER TABLE statement, *data-item* gives the name of the column containing the error. The error could be an invalid specification of FOR BIT DATA, FOR SBCS DATA, FOR MIXED DATA, or FIELDPROC for column data-item.
- For a CREATE FUNCTION or CREATE PROCEDURE statement, *data-item* is a token that identifies the area of the problem in the statement. For example, "PARAMETER 3", "RETURNS", or "CAST FROM".
- For a CREATE DISTINCT TYPE statement, *data-item* gives the name of the type being defined
- Otherwise, *data-item* is a token that identifies the area of the problem in a parameter list for a function. For example, "PARAMETER 5".

System action

The statement cannot be processed.

User response

Correct and reissue the failing statement.

Severity

8 (error)

DSNH684I **E *csectname* LINE *nnnn* COL *cc* LENGTH OF LITERAL LIST BEGINNING *string* IS TOO LONG**

Explanation

The length of the literal list beginning with *string*, excluding insignificant blanks and delimiting parenthesis, is greater than 255.

System action

The SQL statement cannot be executed.

System programmer response

Correct the SQL statement.

Severity

8 (error)

Related concepts

Constants (Db2 SQL)

Language elements (Db2 SQL)

DSNH739I **E *csectname* LINE *nnnn* COL *cc*. CREATE FUNCTION *function-name* FAILED BECAUSE FUNCTIONS CANNOT MODIFY DATA WHEN THEY ARE PROCESSED IN PARALLEL.**

Explanation

The function cannot be created because ALLOW PARALLEL and MODIFIES SQL DATA were both specified explicitly or implicitly. A function cannot be parallelized if it modifies data.

System action

The statement cannot be executed.

User response

Specify DISALLOW PARALLEL or change the MODIFIES SQL DATA to NO SQL, CONTAINS SQL or READS SQL DATA.

Severity

8 (error)

DSNH740I ***xxxxxx phase* FINISHED, RC = *retcode*, LISTING IN *data-set***

Explanation

The DSNH INST phase completed with return code *retcode*. The *phase* is one of the following:

- PLI Macro Pass
- Precompiler
- CICS Command Translator
- Bind Package
- Bind Plan
- Compile/assembly
- PLI
- Prelink (unique to C/370 Compiler)
- Link
- Run

If the CLIST puts the listing into a data set, the name of the data set is shown as *data-set*. If the PRINT parameter is LEAVE, NONE, or TERM, the 'LISTING IN *data-set*' part of this message is omitted.

Refer to message DSNH756I for an explanation of the print data set names assigned during processing.

This message is issued by the following CLIST: DSNH

System action

Processing continues as requested.

User response

This phase is complete. If there are errors, other messages are produced. The next phase requested begins. The order of the phases is:

1. PLI Macro Pass
2. Precompiler
3. CICS Command Translator
4. Bind Package
5. Bind Plan
6. ASM, ASMH, C (C/370 Compiler), COBOL, COBOL2, FORTRAN, PLI
7. Prelink
8. Link
9. Run

Severity

retcode

DSNH741I ***process1*(NO) IMPLIES THAT *process2* CANNOT BE RUN**

Explanation

An inconsistent processing set was specified. An earlier phase and a later phase were requested, but not the intermediate step needed to process data between them. For example, requesting the precompile and the link edit without the compiler produces this error. Values for *process1* are PRECOMP, CICSXLAT, COMPILE, LINK, or BIND. Values for *process2* are COMPILE, LINK, or RUN.

This message is issued by the following CLIST: DSNH

System action

process2 is not performed, but other processing is done.

User response

Specify a consistent combination of processing. Application program preparation needs to run all the steps to provide a correct application program. The process does allow beginning or ending steps to be run at a different time. See message DSNH740I for the required step order.

Severity

4 (warning)

DSNH750I INVALID DATA SET: *clist-keyword clist-keyword-parameter*

Explanation

The data set name specified on the *clist-keyword-parameter* contains unbalanced parenthesis.

This message is issued by the following CLIST: DSNH

System action

The CLIST is terminated.

User response

If a member name is to be associated with the specified data set, the member name must be enclosed in parentheses.

Severity

8 (error)

DSNH751I *clist* ERROR IN *parameter* VALUE *value*

Explanation

The specified CLIST keyword *parameter* does not have an acceptable value.

System action

The CLIST processing is terminated.

User response

Correct the invalid parameter, and resubmit the job.

Severity

8 (error)

Related tasks

Compiling and link-editing an application (Db2 Application programming and SQL)

Related reference

DSNH (TSO CLIST) (Db2 Commands)

DSNH752I INPUT DATA SET NAME IS MISSING OR NONE

Explanation

The DSNH CLIST requires a value for the input data set name (INPUT). You cannot use an input data set name of NONE.

This message is issued by the following CLIST: DSNH

System action

The CLIST prompts for a name, if prompting is allowed. If prompting is not allowed, for example in batch or when PROFILE NOPROMPT was entered, the CLIST terminates.

User response

Specify an INPUT name. See message DSNH753I.

Severity

0 (successful)

DSNH753I ENTER INPUT DATA SET NAME

Explanation

The CLIST is requesting the name of the input data set.

This message is issued by the following CLIST: DSNH

System action

The system waits for user to enter data set name or for the CLIST to be terminated.

User response

Enter the name of the data set. Do not specify the parameter or command, but just enter the name of the

data set. The standard TSO prefixing will be done if the data set name is not entered within apostrophes.

Severity

0 (successful)

DSNH754I ***clist*** **OUTNAME PARAMETER** ***name*** **MUST NOT CONTAIN SPECIAL CHARACTERS**

Explanation

The DSNH and DSNHC CLISTs, *clist*, use the OUTNAME parameter to build names for a number of data sets that are passed from phase to phase. These names are prefixed by an authorization ID or TSO prefix value and have a number of suffixes. For this reason, OUTNAME parameter *name* must not contain special characters. It can contain a period or national characters. It cannot have apostrophes to specify a single data set name.

System action

The CLIST is terminated.

User response

Correct the input request. The default for this parameter is TEMP, which should be adequate for most usage.

Severity

8 (error)

DSNH755I **OUTNAME PARAMETER** ***name*** **MUST NOT BEGIN THE SAME AS INPUT** ***input***

Explanation

The DSNH CLIST uses the OUTNAME parameter *name* to build a number of data sets that are passed from phase to phase. These data sets could conflict with the INPUT data set (*input*) if the names are the same, causing the INPUT data set to be overwritten. To avoid this problem, the names are not allowed to have the same initial characters.

This message is issued by the following CLIST: DSNH

System action

The CLIST is terminated.

User response

Correct the input request. Specify a different OUTNAME. The default for OUTNAME is TEMP.

Severity

8 (error)

DSNH756I ***clist*** **PRINT PARAMETER** ***name*** **MUST NOT CONTAIN SPECIAL CHARACTERS**

Explanation

The DSNH and DSNHC CLISTs (*clist*) use the PRINT parameter to build names for data sets used for the print listings from various phases. These names are prefixed by an authorization ID or a TSO prefix value and have a number of suffixes. The PRINT parameter *name* can contain a period or national characters, but it cannot contain special characters. It cannot have apostrophes to specify a single data set name.

The data set names built using the PRINT(print) qualifier are the following:

print.CXLIST
CICS Command Translator

print.LINKLIST
Linkage Editor

print.LIST
Compiler or Assembler

print.PCLIST
Db2 Precompiler

print.SYSCPRT.LIST
C/370 Compiler

print.SYSOUT.PRELLIST
C/370 Prelink Utility

System action

The CLIST terminates.

User response

Correct the *name* specified with the PRINT parameter.

Severity

8 (error)

DSNH757I **ERROR IN PLAN NAME LENGTH** ***value***

Explanation

The *value* is too long for a plan name. A plan name has a maximum of 8 characters.

This message is issued by the following CLIST: DSNH

System action

The CLIST is terminated.

User response

Specify a plan name with 8 or fewer characters.

Severity

8 (error)

DSNH758I **HOST(*host-language*) IS NOT PERMITTED WITH RUN(IMS) OR RUN(CICS)**

Explanation

There is no facility for connecting a FORTRAN program to either IMS or CICS.

This message is issued by the following CLIST: DSNH

System action

The CLIST terminates.

User response

Use the specified language in the TSO or batch environment.

Severity

8 (error)

DSNH759I ***clist*** **TERMINATING,** ***phase*** **RC =** ***retcode***

Explanation

The DSNH or DSNHC *clist* terminated at *phase* because the return code *retcode* was greater than or equal to the RCTERM parameter value.

System action

The CLIST terminates.

User response

Determine the cause for the high return code. If the parameters include TERM(NONE) and direct the PRINT to a data set, you might need to search the print data sets for the listing of the error. Refer to message DSNH756I for an explanation of the print data set names assigned during processing.

Problem determination

The location of the messages describing the prior errors depends upon the values of the TERM and PRINT parameters. The messages can be directed to the terminal, to preallocated data sets, or to data sets dynamically allocated during CLIST processing.

If TERM(NONE) PRINT(NONE) was specified, the messages are not available. Execute the CLIST again and specify a location for the error messages.

To find the documentation, note the immediately preceding DSNH740I message for the location of the listings. If the 'LISTING IN data-set' portion of the message is missing, specify a PRINT data set, SOURCE(YES) and XREF(YES), and execute the CLIST again. Use TERM(TERM) to direct error messages to your terminal. These listings and execution of the DSNH CLIST are required for problem diagnosis.

If the error is in the CLIST or the error location is CLIST CHECKING, use CONTROL(SYMLIST) to produce a detailed trace of the CLIST execution and provide the trace listing.

Check for DSNH751I messages that describe the error.

Severity

retcode

DSNH760I **PRELINK OPTION INVALID WITH HOST LANGUAGE (*host-language*)**

Explanation

Invocation of the PRELINK step is not supported by *host-language*. This option is only valid for the following DSNH HOST language compilers: C, CPP, and IBMCOB.

This message is issued by the following CLIST: DSNH

System action

The DSNH PRELINK parameter is ignored and prelink utility processing is bypassed. Clist processing continues normally with a return code of 4.

User response

No action is required.

Severity

4 (error)

Related tasks

Compiling and link-editing an application (Db2 Application programming and SQL)

Related reference

DSNH (TSO CLIST) (Db2 Commands)

DSNH794I **W** ***csectname*** **LINE** ***nnnn*** **COL** ***cc*****. THE OBJECT** ***object-name*** **CANNOT BE CREATED BECAUSE THE FIRST**

THREE CHARACTERS ARE RESERVED FOR SYSTEM OBJECTS

Explanation

In general, SYS is a reserved prefix for names. The only exceptions to this rule include the following conditions:

- SYSADM and SYSTOOLS are valid schema names.
- SYSPROC is a valid schema name for stored procedures.
- SYSIBM is a valid schema name for a stored procedure when the current application process has the SYSADM or SYSCTRL privilege.
- SYSTOOLS is a valid schema name when the current application process has the SYSADM or SYSCTRL privilege.

This message is also issued if an attempt is made to grant the CREATEIN, ALTERIN or DROPIN privileges on a schema with the SYS prefix. The same exceptions apply to the grant.

This condition is similar to the condition reported in SQLCODE -20074.

User response

Select a name that does not start with a reserved prefix.

Severity

4

DSNH867I **E *csectname* LINE *nnnn* COL *cc*. INVALID SPECIFICATION OF A ROWID COLUMN**

Explanation

For a CREATE TABLE statement, the specification of a ROWID column might be invalid for one of the following reasons:

- A ROWID column cannot be a column of a temporary table.
- A ROWID column cannot be a column of a table with an EDITPROC.
- A ROWID column cannot be a column of a foreign key.
- A ROWID column cannot be a column of a primary key.
- A ROWID column cannot be referenced in the check-condition of a table check constraint.

System action

The statement was not executed.

User response

Correct the syntax.

Severity

8

DSNH901I **S *csectname* U LINE *nnnn* COL *cc* INTERNAL PRECOMPILER OR DB2 COPROCESSOR ERROR - REASON CODE *ccc***

Explanation

An internal compiler consistency check failed. The following list contains the possible reason codes:

000
The message formatter was called with an unlisted internal message number.

001
The parser received a token code of 0 from the lexical scan. Lexical scan refers to a scan of words rather than syntax.

002
Error in storage suballocation control blocks.

- The error might have occurred because a Db2 SQL statement limitation was exceeded. The SQL statement might be referencing, creating, or declaring more columns than the Db2 defined maximum number allowed for an SQL statement. Another possibility is that too many host variables are being referenced in the SQL statement.

003
Error in a storage suballocation request.

- This error might have occurred because of storage constraints when building the DBRM entry for the SQL statement or because the SQL statement exceeds the Db2 maximum statement length.

004
Error in pointer structures.

005
On BIND or REBIND, a host variable was not found.

006
Unexpected value for parser option.

007
The size of a DBRM entry exceeds the maximum size.

008
Internal conversion error.

- An error occurred when converting a timestamp version-id.

System action

The precompiler or coprocessor is terminated immediately.

System programmer response

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

User response

Notify the system programmer.

Problem determination

A copy of the application program source and the printout is useful (specify SOURCE and XREF).

Severity

16 (unrecoverable error)

DSNH902I **U *csect-name* SEVERE INTERNAL PRECOMPILER OR DB2 COPROCESSOR ERROR IN CONVERSION FROM CCSID *ccsid-1* TO CCSID *ccsid-2*, REASON *reason-number***

Explanation

Db2 parses SQL statements in Unicode UTF-8 (CCSID 1208). The Db2 precompiler or coprocessor will convert the application program internally (not externally) from the application source EBCDIC CCSID to UTF-8 for processing. In some cases, Db2 also converts portions from UTF-8 back to the source EBCDIC CCSID. This message indicates that a severe error has occurred in the internal conversion.

csect-name
The name of the control section that issued the message.

ccsid-1
The original CCSID.

ccsid-2
The converted CCSID.

reason-number
The reason for the message, indicated by one of the following values:

001
The buffer used as part of the interface between the Db2 coprocessor and the host language compiler is too small for the conversion. This reason code can be returned when certain special registers are referenced in your query, and Db2 converts them in this buffer, such as CURRENT SERVER and CURRENT PACKAGESET. If the problem is encountered because of references to a special register, try assigning the value of the special register to a host variable and then replace references to the special register in your query with a reference to the host variable. For example:

1. SET :HV = CURRENT SERVER
2. Update your query to replace references to CURRENT SERVER with :HV

002
An invalid code point was found during conversion.

003
The string being converted does not conform to the rules for valid data.

004
A miscellaneous error occurred on conversion.

System action

The precompiler or coprocessor is terminated immediately.

System programmer response

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

User response

Notify the system programmer.

Problem determination

A copy of the application program source and the printout is useful. Specify SOURCE and XREF.

Severity

16 (unrecoverable error)

DSNH904I ***csectname* U STORAGE OVERFLOW**

Explanation

More storage is needed, but could not be obtained during precompiler/parser execution.

System action

The precompiler/parser is terminated immediately.

System programmer response

The storage required for the current statement could not be acquired or exceeds the maximum for a single request. If the region size is being used completely, check whether the region can be expanded. If it cannot be expanded, the SQL statement is too large to be processed.

Severity

16 (unrecoverable error)

DSNH1760I **E *csectname* LINE *nnnn* COL *cc*. CREATE STATEMENT FOR STORED PROCEDURE *procedure-name* MUST HAVE A VALID LANGUAGE CLAUSE AND EXTERNAL CLAUSE.**

Explanation

The CREATE statement for procedure *procedure-name* must have both a valid LANGUAGE clause and a valid EXTERNAL clause.

System action

The statement cannot be executed.

User response

Correct and reissue the failing statement.

Severity

8 (error)

DSNH4001I **HOST LANGUAGE STATEMENT EXCEEDS MAXIMUM OF 1000 LINES**

Explanation

A PL/I program contains a declaration that covers more than 1000 source lines and contains a LOB variable declaration.

System action

Processing continues.

User response

Split the DCL statement into two parts.

Severity

8

DSNH4408I **E *csectname* LINE *nnnn* COL *cc* THE VALUE IS NOT COMPATIBLE WITH THE DATA TYPE OF ITS TARGET**

Explanation

The data type of the value to be assigned to the parameter or SQL variable is incompatible with the declared data type of the assignment target. Both must be:

- Numerals
- Characters
- Graphics
- Dates or character
- Times or character
- Timestamps or character
- Row ID's
- The same distinct types

System action

The statement cannot be processed.

User response

Examine the current definition for the parameter or SQL variable and ensure that it has the proper data type.

Severity

8 (error)

DSNH4700I **E *csect-name* LINE *line-number* COL *column-number* ATTEMPT TO USE NEW FUNCTION BEFORE NEW FUNCTION MODE**

Explanation

An attempt was made to use syntax for functions that are newer than the version that is specified by the SQL processing option NEWFUN.

csect-name
The name of the control section that issued the message.

line-number* and *column-number
The location of the error in the source program.

When NEWFUN(NO) is specified, you cannot use syntax for functions that are introduced by the current version of Db2. When NEWFUN(V9) is specified, you cannot use syntax for any functions that were introduced after Version 9. When the value of NEWFUN(V8) is specified, you cannot use syntax for any functions that were introduced after Version 8.

System action

If the containing SQL statement is a declaration, it is discarded. If the containing SQL statement is executable, it is replaced by host language statements that will, if executed, set an error code in the SQLCA.

Programmer response

Check the value of the SQL processing option setting for NEWFUN. If the NEWFUN option is not specified, then the installation default value is used.

Do one of these things:

- Restrict your program to functions that earlier releases of Db2 introduced. These functions are allowed regardless of the value of NEWFUN.
- Process your program with a value of YES for the NEWFUN option. However, you cannot BIND the DBRM until New Function Mode has been enabled.

Severity

8 (error)

Related concepts

Implications of falling back (Db2 Installation and Migration)

Application defaults parameters (Db2 Installation and Migration)

Related tasks

Migrating from enabling-new-function mode* to new-function mode (Db2 Installation and Migration)

Related reference

Descriptions of SQL processing options (Db2 Application programming and SQL)

Related information

-4700 (Db2 Codes)

DSNH4701I **S *csectname* OPTION: *option* OPTION NOT PERMITTED WITH NEWFUN NO**

Explanation

You cannot use the indicated SQL processing option when the SQL processing option NEWFUN has a value of NO.

System action

The precompiler is terminated.

Programmer response

To prevent this error in the future, take one of the following actions:

- Restrict your precompilation to options that were introduced in earlier releases of Db2. These options are valid regardless of the value of NEWFUN.
- Process your program with a value of YES for the NEWFUN option.

Severity

12 (severe error)

DSNH4702I ***column* IS NOT VALID IN THE CONTEXT WHERE IT IS USED**

Explanation

The specified column is not a column of the table or view that was specified as the object of the UPDATE or INSERT operation.

System action

The statement cannot be executed. No data was updated.

Programmer response

Verify that the column and table names are specified correctly in the SQL statement. If a correlation name is specified for a table or view, verify that subsequent table references of the table or view in qualified column names use the correlation name and not the table or view name.

SQLSTATE

42703

DSNH4760I **THE DB2 SQL COPROCESSOR IS USING THE LEVEL *nnn* INTERFACE UNDER DB2 VERSION *db2-version***

Explanation

This message specifies the level of the Db2 SQL coprocessor that is in use. This message is for IBM software support.

System action

No action required.

User response

No action required.

Severity

0 (informational)

DSNH4761I **THE DB2 SQL COPROCESSOR HAS CHANGED THE NEWFUN OPTION VALUE FROM YES TO NO**

Explanation

The Db2 SQL coprocessor option NEWFUN(YES) was specified, but the level of the Db2 SQL coprocessor interface is not compatible with NEWFUN(YES). Therefore, the Db2 SQL coprocessor is running with NEWFUN(NO). Functions that are specific to the new version of Db2 are not allowed.

System action

No action required.

User response

Upgrade to a later compiler version that supports the new Db2 functions.

Severity

4 (warning)

DSNH4762I **W *csectname* LINE *nnnn* COL *cc* SQL OPTIONS REQUIRE NEWER COMPILER**

Explanation

The Db2 SQL coprocessor was used during compilation of a Db2 application. One or more of the following SQL options were specified:

- STDSQL(YES)
- TWOPASS

The level of the compiler that was used does not support those SQL options.

System action

Processing continues.

User response

If the SQL options are required, upgrade to a newer level of the compiler.

Refer to message DSNH4760I in the output listing and the Db2 Program Directory for information on selecting the correct level of the compiler to use.

If the SQL options are not required, remove them.

Severity

4 (warning)

DSNH4763I **E *csect-name* LINE *nnnn* COL *cc* SQL TYPE IS CLAUSE WAS INCORRECTLY SPECIFIED**

Explanation

The SQL TYPE IS clause was incorrectly specified in a Db2 application that was prepared with the Db2 SQL coprocessor.

System action

The statement cannot be processed.

User response

Correct the statement syntax.

Severity

8 (error)

Related concepts

Differences between the Db2 precompiler and the Db2 coprocessor (Db2 Application programming and SQL)

Compatibility of SQL and language data types (Db2 Application programming and SQL)

Related tasks

Processing SQL statements by using the Db2 coprocessor (Db2 Application programming and SQL)

Related reference

Equivalent SQL and Fortran data types (Db2 Application programming and SQL)

DSNH4770I **E *csect-name* SQLFLAG PRECOMPILER OPTION IS NO LONGER SUPPORTED**

Explanation

Federal Information Processing Standards (FIPS) and SAA flagging support is disabled. You can no longer specify the precompiler option SQLFLAG.

System action

Precompiler ends with a return code of 8.

User response

Remove the SQLFLAG precompiler option.

Severity

8 (error)

DSNH4771I **E *csectname* PRECOMPILER OPTION QUOTE CANNOT BE SPECIFIED IN THIS CONTEXT. USE THE APOST OPTION**

Explanation

When the value of the CCSID precompiler option is 1026 or 1155, and the value of the HOST precompiler option is IBMCOB, the APOST precompiler option must be used because the precompiler modified source defines the quotation mark with the hex point of 'FC'X, which is not taken by the COBOL compiler.

System action

Processing continues.

User response

Specify the APOST precompiler options, and precompile the application again. There is no need to modify the COBOL source.

Severity

8 (error)

DSNH4772I **I *csect-name* LINE *line-number* COL *column-number* UNQUALIFIED IDENTIFIER *identifier-name* IS USED IN AN AMBIGUOUS CONTEXT**

Explanation

The identifier that is indicated by *identifier-name* is not a unique reference in the SQL statement context.

csect-name
The name of the control section that issued the message.

line-number* and *column-number
The location of the error in the source program.

identifier-name
The non-unique identifier. An *sql-parameter* or *sql-variable* with the same name is declared, but it does not have priority over a column with this name in this context.

System action

Processing continues.

User response

Inspect the ambiguous reference, and qualify the named identifier to clarify the intended usage in the SQL statement.

- For a reference to an SQL parameter, qualify the name with the SQL PL routine name.
- For a reference to an SQL variable, qualify the name with the label of the compound statement that declares the variable. If no label is present in the compound statement, add one.
- For a reference to a column, qualify the name with the appropriate table designator.

Severity

0 (informational)

DSNH4773I **W *csect-name* LINE *line-number* COL *column-number* HANDLER BODY IS A CONTROL STATEMENT OTHER THAN A COMPOUND STATEMENT**

Explanation

The body of a handler declaration is an SQL control statement other than an SQL compound statement.

csect-name
The name of the control section that issued the message.

line-number* and *column-number
The location of the error in the source program.

This usage causes the original condition information available to the condition handler logic to be displaced in the following manner:

- The SQL diagnostic area accessed by a GET CURRENT DIAGNOSTICS statement will be modified and unrelated to the original condition.
- The values of variables SQLSTATE and SQLCODE will be modified and unrelated to the original condition.

System action

Processing continues.

User response

Replace the SQL control statement (IF, CASE, LOOP, REPEAT, WHILE) that defines the body of the handler declaration with an SQL compound statement (BEGIN).

Severity

4 (warning)

DSNH4775I **E *csect-name* LINE *line-number* COL *column number* STATEMENT SPECIFIED IN SQL ROUTINE IS NOT ALLOWED WITHIN A COMPOUND STATEMENT**

Explanation

A statement specified in the routine body is not allowed in a compound statement.

csect-name
The name of the control section that issued the message.

line-number* and *column number
The location of the error in the source program.

An ATOMIC compound statement cannot be specified:

- In an SQL scalar function.
- In an SQL procedure.
- Within another compound statement that is defined as ATOMIC.

System action

The statement cannot be processed.

User response

Remove the statement from the SQL routine.

Severity

8 (error)

DSNH4777I **E *csectname* LINE *nnnn* COL *cc* NESTED COMPOUND STATEMENTS NOT ALLOWED**

Explanation

An SQL procedure contains nested compound statements, which are not allowed.

System action

The statement cannot be executed.

User response

Rewrite the SQL procedure body so that it does not contain nested compound statements.

Severity

8 (error)

DSNH4778I **E *csect-name* LINE *line-number* COL *column number* END LABEL *label-name* NOT SAME AS BEGIN LABEL**

Explanation

An SQL routine statement contains an ending label and a beginning label that do not match.

csect-name
The name of the control section that issued the message.

line-number* and *column number
The location of the error in the source program.

label-name
The name given for the ending label.

System action

The statement cannot be processed.

User response

Change the ending label in the statement to match the beginning label.

Severity

8 (error)

DSNH4779I ***csectname* LINE *nnnn* COL *cc* LABEL *label* SPECIFIED *statement* IS NOT VALID**

Explanation

In an SQL procedure, *label* is specified on a GOTO or LEAVE statement. *label* is not defined or is not a valid label for the statement.

The label on a LEAVE statement must be the label for a LOOP, REPEAT, WHILE, or compound statement.

The label in a GOTO statement must be defined within a scope that the GOTO statement can reach.

- If the GOTO statement is defined in a compound statement, *label* must be defined inside the same compound statement.
- If the GOTO statement is defined in a handler, *label* must be defined in the same handler and must follow the other scope rules.
- If the GOTO statement is defined outside a handler, *label* must not be defined within a handler.

System action

The statement cannot be processed.

User response

Change the label in the LEAVE statement to match the label on the LOOP, REPEAT, WHILE, or COMPOUND statement that contains the LEAVE statement.

Ensure that the label in the GOTO statement is defined within a scope that the GOTO statement can reach.

Severity

8 (error)

DSNH4780I **E *csect-name* LINE *line-number* COL *column number* UNDO SPECIFIED FOR A HANDLER**

Explanation

In an SQL routine, UNDO is specified for a handler, which is not supported.

csect-name
The name of the control section that issued the message.

line-number* and *column number
The location of the error in the source program.

System action

The statement cannot be processed.

User response

Change the UNDO handler to a CONTINUE or EXIT handler.

Severity

8 (error)

DSNH4781I **E *csect-name* LINE *line-number* COL *column number* CONDITION *condition-name* SPECIFIED IN HANDLER NOT DEFINED**

Explanation

A handler is declared for a condition in an SQL routine, but the routine does not contain a condition declaration statement that defines the condition.

csect-name
The name of the control section that issued the message.

line-number* and *column number
The location of the error in the source program.

condition-name
The name of the condition that is not defined.

System action

The statement cannot be processed.

User response

Include a condition declaration statement in the SQL routine that relates the condition name to an SQLSTATE value.

Severity

8 (error)

DSNH4782I **E *csect-name* LINE *line-number* COL *column number* A CONDITION OR SQLSTATE *condition-value* SPECIFIED IS NOT VALID**

Explanation

An SQL routine specified a condition value that is not valid.

condition-value
Either a specific condition value, which is provided as an SQLSTATE value, or a general condition value, such as SQLEXCEPTION, SQLWARNING, or NOT FOUND.

The condition or SQLSTATE value is not valid for one of the following reasons:

- The handler declaration or condition declaration specifies an SQLSTATE value that is not valid.
- The condition or SQLSTATE value has already been specified by another handler in the same scope.
- The condition or SQLSTATE was specified in the same handler as SQLEXCEPTION, SQLWARNING, or NOT FOUND.

System action

The statement cannot be processed.

User response

Correct the condition or SQLSTATE value.

Severity

8 (error)

DSNH4783I **E *csectname* LINE *nnnn* COL *cc* SELECT LIST FOR CURSOR *cursor-name* IN FOR STATEMENT NOT VALID**

Explanation

An SQL procedure contains a FOR statement in which the select list in the cursor declaration has a column that is not valid. That column is a duplicate of another column in the select list, or the column is not named.

System action

The statement cannot be executed.

User response

Ensure that all columns in the select list for a cursor declaration in a FOR statement are unique and are named. If a column of the select list is the result of a column function, specify an AS clause to name the column.

Severity

8 (error)

DSNH4784I **E *csect-name* DSNHDECP IS FOR DB2 VERSION "*dsnhdecp-version*" BUT *product-name* IS FOR DB2 VERSION "*dsnhdecp-version*"**

Explanation

The release information from the given DSNHDECP module or user-supplied application defaults module does not match the current level of the Db2 precompiler or SQL coprocessor.

System action

The precompiler or SQL coprocessor is terminated.

Programmer response

Ensure that a *dsnhdecp* data-only load module for the correct Db2 version is available to the precompiler or SQL coprocessor, and that *dsnhdecp* load module is the one that Db2 finds first. Db2 searches for the*dsnhdecp* module in the following places, and in the following order:

- The STEPLIB concatenation for the precompile or compiler step for SQL coprocessor
- The JOBLIB concatenation for the job that includes the precompile step or compiler step for SQL coprocessor
- The system link list

Severity

12 (severe error)

DSNH4785I **E *csect-name* LINE *line-number* COL *column number* THE DECLARATION OR USE OF THE SQLSTATE OR SQLCODE VARIABLE IS NOT VALID**

Explanation

The use of SQLCODE or SQLSTATE in an SQL routine body is invalid for one of the following reasons:

- SQLCODE or SQLSTATE was specified as a parameter name.
- SQLCODE is not declared as INTEGER in a return-codes-declaration clause.
- SQLSTATE is not declared as CHAR(5) in a return-codes-declaration clause.
- SQLCODE or SQLSTATE is assigned the value NULL.

csect-name
The name of the control section that issued the message.

line-number* and *column number
The location of the error in the source program.

System action

The statement cannot be processed.

User response

Declare SQLSTATE only as CHAR(5) and SQLCODE only as INTEGER. Do not assign the null value to SQLCODE or SQLSTATE. Do not use SQLCODE or SQLSTATE as parameter names.

Severity

8 (error)

DSNH4787I **E *csectname* LINE *nnnn* COL *cc* RESIGNAL STATEMENT NOT WITHIN A HANDLER**

Explanation

The RESIGNAL statement can only be used inside condition handlers.

System action

The statement cannot be processed.

User response

Remove the RESIGNAL statement or use a SIGNAL statement instead.

Severity

8 (error)

DSNH4788I ***csectname*** **CCSID** ***ccsid*** **FOR PROGRAM SOURCE CODE IS NOT SUPPORTED**

Explanation

The Db2 precompiler or Db2 coprocessor does not accept input source code with the specified CCSID. The rules for the CCSID are:

- When source code for an external SQL procedure is precompiled, the CCSID must be a Latin-1 EBCDIC CCSID.
- For other uses of the Db2 precompiler or Db2 coprocessor, the CCSID must be an EBCDIC CCSID.

System action

The precompiler or Db2 coprocessor terminates.

User response

Specify an EBCDIC CCSID.

Severity

16 (unrecoverable error)

DSNH4789I ***csectname*** **SQL PROCESSING OPTION "*option*" IS IGNORED**

Explanation

When using the Db2 precompiler or the Db2 coprocessor, the SQL processing option *option* is ignored.

System action

Processing continues.

User response

Make sure the correct CCSID is provided to the precompiler or coprocessor.

If the CCSID provided is a single-byte CCSID, then x'0E' and x'0F' characters are not interpreted as shift-out and shift-in characters surrounding DBCS characters. If the CCSID provided is a mixed CCSID, then x'0E' and x'0F' characters are interpreted as shift-out and shift-in characters surrounding DBCS characters.

The NEWFUN processing option is deprecated.

Related concepts

Options for SQL statement processing (Db2 Application programming and SQL)

DSNH4790I ***csect-name*** **DSNHDECP HAS EBCDIC CCSID** ***ccsid*** **IN EFFECT**

Explanation

This message indicates the CCSID that is specified in the DSNHDECP MODULE. This CCSID is SCCSID if the MIXED DATA field is NO in DSNHDECP, or MCCSID if the MIXED DATA field is YES.

csect-name
The name of the control section that issued the message.

ccsid
The CCSID that is specified in the DSNHDECP module.

System action

No action is required.

User response

No action is required.

Severity

0 (informational)

Related concepts

Application defaults parameters (Db2 Installation and Migration)

Related tasks

Specifying subsystem CCSIDs (Db2 Internationalization Guide)

DSNH4791I ***csect-name*** **CCSID** ***ccsid-1*** **IS USED TO PROCESS SQL, BUT DSNHDECP HAS EBCDIC CCSID** ***ccsid-2*** **IN EFFECT**

Explanation

The Db2 coprocessor is using CCSID *ccsid-1* to process SQL. *ccsid-1* is different from the *ccsid-2*, which was loaded from the DSNHDECP module.

csect-name
The name of the control section that issued the message.

ccsid-1
The CCSID that was used to process SQL statements.

ccsid-2
The CCSID that was loaded from the DSNHDECP module. *ccsid-2* is SCCSID if the MIXED DATA field is NO in DSNHDECP, or MCCSID if the MIXED DATA field is YES.

System action

Processing continues.

User response

Ensure that the CCSIDs specified for compilation is the CCSID intended for processing SQL. Processing SQL with a CCSID different from the CCSID used in database tables can lead to unexpected results. The CCSID that is used to interpret data in host variables can be from the DSNHDECP module, the ENCODING BIND option, a CCSID specified on the DECLARE VARIABLE statement or specified as a compile option such as CCSID0 for PL/I or SQLCCSID for COBOL.

Check the program listing for message DSNH527I, which was issued if the coprocessor is using the Db2-supplied DSNHDECP module. If it is not intended to use the Db2-supplied DSNHDECP module, refer to the description of DSNH527I to take corrective action.

Severity

4 (warning)

Related tasks

Specifying a CCSID for your application (Db2 Internationalization Guide)

Specifying subsystem CCSIDs (Db2 Internationalization Guide)

Related information

DSNH527I
WARNING: THE PRECOMPILER OR DB2 COPROCESSOR ATTEMPTED TO USE THE DB2-SUPPLIED DSNHDECP MODULE.

DSNH4792I ***csect-name*** **LINE** ***line-number*** **COL** ***column-number*** **SQL STATEMENT WILL CAUSE AN ERROR IN BIND, REASON** ***reason-code***

Explanation

An SQL statement that uses invalid syntax was detected by the precompiler or Db2 coprocessor. This message does not terminate the compile, but binding the DBRM produced by this compile may result in an error.

csect-name
The name of the control section that issued the message.

line-number
The line number of the invalid SQL syntax.

column-number
The column number of the invalid SQL syntax

reason-code

1. A SELECT INTO statement contains a UNION or UNION ALL set operator.

System action

The invalid SQL is allowed in the compile.

User response

Plan to revise the SQL statement to remove the invalid syntax.

Severity

4 (warning)

Related reference

SELECT INTO (Db2 SQL)

fullselect (Db2 SQL)

DSNH4920I **E** ***csectname*** **TOKEN ID ARRAY TOO SMALL**

Explanation

The Db2 coprocessor needs more token identifier array entries than the coprocessor allocated.

System action

Control is returned to caller with no other action taken.

User response

Allocate a larger token identifier array and make the call to SQLGCMPL again.

Severity

8 (error)

DSNH5011I **HOST VARIABLE ARRAY** ***host-variable-array*** **IS EITHER NOT DEFINED OR IS NOT USABLE**

Explanation

Host-variable-array *host-variable-array* was specified in a multiple-row FETCH or multiple-row INSERT statement. The host-variable-array is not defined or is not usable for one of the following reasons:

- The host variable is not a valid host-variable-array.
- The host variable is not a dimensioned array.

- The host-variable-array has more than 1 dimension.
- The host-variable-array defines a structure that does not conform to the rules for defining a host-variable-array.
- The dimension of the host-variable-array used for indicators is not equal to the dimension of the main host-variable-array.

System action

The statement cannot be processed.

Programmer response

Correct any of the following and precompile the program again. Ensure that:

- the dimension of the indicator variable array is equal to the dimension of the main host-variable-array.
- the host-variable-array is a single-dimensional array.
- the host-variable-array or host indicator variable array do not contain structures that are not permissible. The only structures that may be defined in a host-variable-array are those that are used to define variable length string host variables.

Related concepts

Host variable arrays (Db2 Application programming and SQL)

Related tasks

Declaring host variables and indicator variables (Db2 Application programming and SQL)

DSNH5033I DECLARE VARIABLE NOT VALID FOR *variable*

Explanation

Host variable *variable* specified in a DECLARE VARIABLE statement is not valid. The DECLARE VARIABLE statement occurs after any SQL statement (in a COBOL or FORTRAN application program) or after a DECLARE CURSOR statement (in an application program in any other host language), where the SQL statement and the DECLARE VARIABLE refer to the same variable.

System action

The statement cannot be processed.

User response

Ensure that the DECLARE VARIABLE occurs before the use of the host variable in an SQL statement in the application.

Severity

8 (error)

DSNH5034I DECLARE VARIABLE NOT VALID FOR *variable*

Explanation

Host variable *variable* specified in a DECLARE VARIABLE statement is not valid for one of the following reasons:

- A reference is made to a variable that does not exist.
- A reference is made to a variable that is a structure.
- A reference is made to a variable that is a component of two more structures.
- The host variable is not defined as character, varying-length character, graphic, varying-length graphic, CLOB, or DBCLOB. In this case, CLOB AS LOCATOR or DBCLOB AS LOCATOR is not considered a CLOB or DBCLOB.
- FOR BIT DATA, CCSID 65535, FOR MIXED DATA, FOR SBCS DATA is specified and the variable is defined as graphic, varying-length graphic, or DBCLOB.
- FOR BIT DATA, or CCSID 65535 is specified and the variable is defined as CLOB.

System action

The statement cannot be precompiled.

User response

Correct the definition of the host variable. Precompile the program again.

Severity

8 (error)

DSNH5035I HOST VARIABLE *variable* IS SPECIFIED TWICE IN A DECLARE VARIABLE STATEMENT

Explanation

The host variable *variable* was specified in two or more DECLARE VARIABLE statements, or was specified two or more times in one DECLARE VARIABLE statement. A host variable can be specified once at most in a DECLARE VARIABLE statement.

System action

The statement cannot be processed.

User response

Specify the host variable at most once in a DECLARE VARIABLE statement.

Severity

8 (error)

DSNH5036I CCSID VALUE OUT OF RANGE

Explanation

The CCSID for a DECLARE VARIABLE or CAST statement is outside the range 1 - 65533, or the value 65535. The value must be within the range 1 - 65533, or the value must be 65535.

System action

The statement cannot be processed.

User response

If this message is issued for a "DECLARE VARIABLE CCSID integer"or "CAST CCSID integer" statement, change the value to be within the range 1 - 65533 or the value 65535. If this message is issued for a DECLARE VARIABLE statement with the "FOR SBCS DATA" or "FOR MIXED DATA" clause, then the CCSIDs specified on panel DSNTIPF at installation time need to be updated with valid values.

Severity

8 (error)

DSNH5037I DECLARE VARIABLE STATEMENT FOUND WITH ONE-PASS PRECOMPILATION

Explanation

A DECLARE VARIABLE statement was found, but the source program is being precompiled with only one pass. If a DECLARE VARIABLE is used in an assembler source program, the ONEPASS precompiler option must not be used. If a DECLARE VARIABLE is used in a C, C++, or PL/I source program, the TWOPASS precompiler option must be used.

System action

The source program cannot be precompiled.

User response

Specify the TWOPASS precompiler option or, for assembler, do not specify the ONEPASS precompiler option.

Severity

8 (error)

DSNH20008I ATTEMPT TO USE UNSUPPORTED FEATURE *msg-token*. REASON CODE: *reason-code*

Explanation

The statement attempted to use a feature or format that is not supported.

msg-token
Text that identifies the unsupported feature.

reason-code
A numeric value that identifies the unsupported feature.

3
TYPE 1 indexes are no longer supported. Only TYPE 2 can be specified, beginning in DB2 Version 6.

4
The DSETPASS keyword is no longer supported, beginning with DB2 Version 6.

System action

The statement or EXPLAIN operation cannot be processed.

Programmer response

Take appropriate action based on the *reason-code* value. In most cases, remove references to the unsupported clause or keyword from the SQL statement, to avoid using the unsupported feature.

SQLSTATE

560A9

Severity

8 (error)

Related concepts
Function that Db2 11 no longer supports (Db2 for z/OS What's New?)
Related reference
Deprecated function in Db2 11 (Db2 for z/OS What's New?)
Related information
-20008 (Db2 Codes)
+20520 (Db2 Codes)

DSNH20060I E *csect-name* LINE *line-number* COL *column-identifier* UNSUPPORTED DATA TYPE *data-*

type* ENCOUNTERED IN SQL *object-type object-name

Explanation

An unsupported data type was specified in the definition of an object.

csect-name
The name of the control section that issued the message.

line-number* and *column-identifier
The location of the definition.

data-type
The data type that was specified. This data type is not supported for SQL procedure parameters or variables.

For native SQL procedures, you cannot use the ROWID data type.

For external SQL procedures, you cannot use the following data types:

- BINARY
- VARBINARY
- BIGINT
- DECIMAL FLOAT
- XML
- ROWID
- TIMESTAMP with precision
- TIMESTAMP WITH TIME ZONE
- Distinct type

object-type
The type of object.

object-type
The type of object.

object-name
The name of the object.

System action

The statement cannot be processed.

User response

Change the syntax to specify a supported data type.

Severity

8 (error)

DSNH20061I **E *csectname* LINE *nnnn* COL *cc* UNEXPECTED ERROR RETURNED FROM LANGUAGE ENVIRONMENT: REASON CODE *reason-code*, RETURN CODE *return-code* *module-name***

Explanation

An Language Environment® error occurred while the Db2 precompiler was processing an SQL procedure. The reason codes and associated return codes are:

Reason code
Meaning and associated return code

1
No PIPI token. *return-code* is the return code from the CEEPIPI(init_sub) call.

2
CEE could not be loaded. *return-code* is the return code from the CEEPIPI(add_entry) call.

3
PIPI would not terminate. *return-code* is the return code from the CEEPIPI(term) call.

4
Call to *module-name* failed. *return-code* is the return code from the CEEPIPI(call_sub) call.

5
Bad response from PIPI. *return-code* is the return code from *module-name*.

See the explanation of return codes for the appropriate CEEPIPI call in *z/OS Language Environment Programming Guide* for explanations of the Language Environment return codes.

System action

The statement cannot be executed.

User response

Correct the condition that is described by *reason-code*.

Severity

8 (error)

DSNH20111I **E *csect-name* LINE *line-number* COL *column number* CANNOT ISSUE SAVEPOINT, RELEASE SAVEPOINT, ROLLBACK TO SAVEPOINT FROM A TRIGGER, FROM A USER-DEFINED FUNCTION, OR FROM A GLOBAL TRANSACTION**

Explanation

An invalid statement was issued.

csect-name
The name of the control section that issued the message.

line-number* and *column number
The location of the error in the source program.

The following statements cannot be used in the body of a trigger, global transaction, or user-defined function:

- SAVEPOINT
- RELEASE SAVEPOINT
- ROLLBACK TO SAVEPOINT

System action

The statement is not processed.

Programmer response

Correct the logic of the application program so that this error does not occur.

Severity

8 (error)

Related reference
SAVEPOINT (Db2 SQL)
RELEASE SAVEPOINT (Db2 SQL)
ROLLBACK (Db2 SQL)

DSNH20120I **E *csect-name* LINE *line-number* COL *column number* AN SQL TABLE FUNCTION MUST RETURN A TABLE RESULT**

Explanation

An SQL function that specifies TABLE in the RETURNS clause must return a result that is a table.

csect-name
The name of the control section that issued the message.

line-number* and *column number
The location of the error in the source program.

System action

The statement can not be processed.

User response

Either remove the TABLE keyword from the RETURNS clause to make it a scalar function or specify a fullselect in the RETURN statement of the TABLE function body.

Severity

8 (error)

DSNH20129I **E *csectname* LINE *nnnn* COL *cc* SPECIAL REGISTER IS NOT VALID AS USED**

Explanation

An attempt was made to reference a special register, but the syntax was invalid for the special register.

The CURRENT PACKAGE PATH special register, or a local special register such as CURRENT SERVER, CURRENT PACKAGESET, or CURRENT APPLICATION ENCODING SCHEME cannot be referenced in a SET *assignment-statement* statement or VALUES INTO statement where:

- The special register is part of an expression in the source value.
- Multiple source values are being assigned to multiple targets.
- The source value in an assignment is the CURRENT PACKAGE PATH special register or a local special register, and the target is an array variable.

If the target is not an array variable, the only valid uses of these special registers in a SET *assignment-statement* statement or VALUES INTO statement are:

- SET *variable*= CURRENT APPLICATION ENCODING SCHEME;
- SET *variable*= CURRENT SERVER;
- SET *variable*= CURRENT PACKAGESET;
- SET *variable*= CURRENT PACKAGE PATH;
- VALUES CURRENT APPLICATION ENCODING SCHEME INTO *variable*;
- VALUES CURRENT SERVER INTO *variable*;
- VALUES CURRENT PACKAGESET INTO *variable*;
- VALUES CURRENT PACKAGE PATH INTO *variable*;

System action

The statement cannot be processed.

Programmer response

Correct the statement in one of the following ways:

- Do not use the special register in an expression as the source value of a SET *assignment-statement* or VALUES INTO statement.
- Do not assign multiple values to multiple special registers in a SET *assignment-statement* or VALUES INTO statement.

- Do not assign a special register to a target that is an array variable.

Severity

8 (error)

DSNH20148I **E *csect-name* LINE *line-number* COL *column number* A RETURN STATEMENT DOES NOT EXIST OR WAS NOT INVOKED DURING THE EXECUTION OF ROUTINE *routine-name* WITH SPECIFIC NAME *specific-name***

Explanation

The SQL function must contain at least one RETURN statement and a RETURN statement must be executed when the function is invoked.

csect-name
The name of the control section that issued the message.

line-number* and *column number
The location of the error in the source program.

routine-name
The name of the routine.

specific-name
The specific function name, which is unique within the schema.

System action

The statement can not be processed.

User response

Ensure that a RETURN statement is executed when the function is invoked.

Severity

8 (error)

DSNH20228I **A STACKED DIAGNOSTICS AREA IS NOT AVAILABLE**

Explanation

A stacked diagnostics area is only accessible from within a handler in a native SQL routine.

This error can occur when the STACKED keyword is specified in a GET DIAGNOSTICS statement outside of an SQL procedure.

System action

The statement was processed.

Programmer response

Modify the application logic so that the STACKED diagnostic is only accessed from within a handler. If the routine is an external SQL procedure, or a host language program then the STACKED keyword cannot be used.

DSNH20289I **INVALID STRING UNIT *unit* SPECIFIED FOR FUNCTION *function-name***

Explanation

The statement invoked a built-in function using a string length unit that is not valid with the type of data that is provided to the function. This can occur for the following reasons:

- Binary data was specified with *unit*. CODEUNITS16, or CODEUNITS32 are not valid with binary string data.
- Graphic data was specified with OCTETS as the string length unit. OCTETS is not valid with graphic data.

System action

The statement cannot be processed.

System programmer response

Change the invocation of the function to remove the invalid string length unit specification or change it to a valid string length unit for the data type being processed.

DSNH20367I **W *csectname* LINE *nnnn* COL *cc* OPTION *clause* IS NOT SUPPORTED IN THE CONTEXT IN WHICH IT WAS SPECIFIED**

Explanation

The *clause* in the statement is not supported in the context in which has been specified. The *clause* is ignored.

System action

Processing continues normally.

User response

No change is required for the current release; however, it is recommended that the statement be modified to conform to valid SQL syntax.

DSNH20428I **E *csect-name* LINE *line-number* COL *column-number*, URI**

SPECIFIED IN THE XMLSCHEMA CLAUSE IS AN EMPTY STRING

Explanation

An empty string was found in the XMLSCHEMA clause.

csect-name
The name of the control section that issued the message.

line-number* and *column-number
The location of the error in the source program.

System action

The SQL statement that contains the empty string is discarded.

User response

Specify the URI in the correct format.

Severity

8 (error)

DSNH20436I **E *csect-name* LINE *line-number* COL *column number* THE DATA TYPE SPECIFIED FOR AN ARRAY TYPE IS NOT VALID.**

Explanation

The data type that is specified for an array in one of the following contexts is not valid:

- CREATE TYPE statement
- Array constructor
- Argument to UNNEST
- Argument to ARRAY_AGG
- Target of ARRAY_AGG

The following restrictions apply to the data type for an array:

- These data types are not supported:
  - ROWID
  - XML
  - A user-defined data type other than an array data type
- The data type for an array index of an associative array must be INTEGER or VARCHAR, with a length attribute no greater than 32704.

System action

The statement cannot be processed.

Programmer response

Use a supported data type.

Severity

8 (error)

Related reference
Array constructor (Db2 SQL)
collection-derived-table (Db2 SQL)
CREATE TYPE (Db2 SQL)

DSNH20441I **E *csect-name* LINE *line-number* *type-name* TYPE IS NOT VALID WHERE SPECIFIED. REASON CODE *reason-code*.**

Explanation

An array data type cannot be specified in the context in which it is used.

type-name
The name of the array type.

reason-code
A numeric value that indicates the reason that the statement cannot be executed. Possible values are:

1
An array data type was specified where an array type is not supported, or a value that is not an array data type was specified where an array value is required.

Some of the contexts in which an array data type is supported are:

- A parameter to an SQL function
- A return data type from an SQL function
- A Parameter to an SQL procedure
- An SQL variable that is declared in an SQL function
- An SQL variable that is declared in an SQL procedure

Some of the contexts in which an array data type is not supported are:

- A parameter or variable for an external routine
- A return type of an inline SQL function
- A column in a table

The UNNEST operator must be an array value. That array value must be one of the following items:

- An SQL variable

- An SQL parameter
- An array function invocation
- A CAST specification of a parameter marker to an array type

2

A global variable was defined as a distinct type. A global variable cannot be defined as a distinct type.

System action

The statement cannot be processed.

Programmer response

See the documentation for the SQL statement on which the error occurred for a complete list of restrictions on the use of the array data type in that context. Change the SQL statement to use an array data type only in a context in which it is allowed.

Severity

8 (error)

Related reference

Array constructor (Db2 SQL)
ARRAY_DELETE (Db2 SQL)
TRIM_ARRAY (Db2 SQL)
EXISTS predicate (Db2 SQL)
ALTER TABLE (Db2 SQL)
CREATE FUNCTION (external scalar) (Db2 SQL)
CREATE FUNCTION (external table) (Db2 SQL)
CREATE PROCEDURE (external) (Db2 SQL)
CREATE TABLE (Db2 SQL)
DECLARE GLOBAL TEMPORARY TABLE (Db2 SQL)

DSNH20474I PERMISSION OR MASK CANNOT BE CREATED FOR *object-name* OF TYPE *object-type*. REASON CODE *reason-code*.

Explanation

The CREATE PERMISSION or CREATE MASK statement failed

object-name
The name of the object.

object-type
The type of object.

reason-code
The reason for the message or SQL code, indicated by one of the following values:

11

A SELECT clause contains either * or `name.*`.

14

An ordinary SQL identifier contains a dash (-).

System action

The statement cannot be processed.

Programmer response

Correct the syntax, and reissue the statement.

Related reference

CREATE MASK (Db2 SQL)
CREATE PERMISSION (Db2 SQL)

DSNH20494I A PUBLIC ALIAS NAME, *name*, CAN ONLY BE QUALIFIED WITH SYSPUBLIC AND NOT THE SCHEMA NAME *schema-name*.

Explanation

A qualified name was specified for a public alias but the qualifier was not SYSPUBLIC.

System action

The statement cannot be processed.

User response

Change the two-part name to a one-part name or specify the qualifier SYSPUBLIC. If a public alias was not intended and PUBLIC was specified in the statement, remove the keyword PUBLIC.

DSNH20524I THE STATEMENT FAILED BECAUSE OF AN INVALID PERIOD SPECIFICATION OR PERIOD CLAUSE FOR PERIOD *period-name*. REASON CODE *reason-code*.

Explanation

A period specification or period clause is invalid.

period-name
The name of the period that is invalid. Possible values are BUSINESS_TIME or SYSTEM_TIME.

reason-code
A numeric value that indicates why the period is invalid. *reason-code* can have the following value:

3

period-name violated the following requirement: each expression must return a value of a built-in data type and can contain any of the following supported operands:

- A constant
- A special register
- A variable, which can be either a host variable, an SQL variable, an SQL parameter, a transition variable, or a global variable
- A parameter marker
- A CAST specification where the cast operand is a supported operand
- An expression that uses arithmetic operators and operands
- A scalar function whose arguments are supported operands

These rules have the following exceptions:

- A period specification or period clause for a view must not contain an untyped parameter marker.
- The source expression of SET CURRENT TEMPORAL BUSINESS_TIME and SET CURRENT TEMPORAL SYSTEM_TIME statements must not contain a parameter marker or a transition variable.

System action

The statement cannot be processed.

User response

Correct the syntax and resubmit the statement.

Severity

8 (error)

Related concepts

Data types (Db2 SQL)

Variables (Db2 SQL)

Related reference

Special registers (Db2 SQL)

CAST specification (Db2 SQL)

Scalar functions (Db2 SQL)

Chapter 7. DSNI messages

Message identifiers that begin with DSNI communicate information about the data manager.

DSNI001I **RESTART HAS BEEN DEFERRED REASON *reason-code* TYPE *resource-type* NAME *resouce-name***

Explanation

Restart could not be performed for one or more pages of the identified resource. Those pages are placed in the logical page list (LPL) and restart for those pages is deferred. The reason code explains why restart was not performed.

reason-code
The reason that the restart failed.

resource-type* and *resource-name
The type and name of the resource that the message identifies. For an explanation of *resource-type* and *resource-name* values, see Appendix C, “Resource types,” on page 1171.

System action

Db2 restart continues. Pages for which restart activity was not performed are put into the LPL.

User response

Correct the problem indicated by the reason code. Then use the START DATABASE command or the RECOVER utility to remove the pages from the LPL.

Related tasks

Removing pages from the logical page list (Db2 Administration Guide)

Deferring restart processing (Db2 Administration Guide)

Related reference

-START DATABASE (Db2) (Db2 Commands)

RECOVER (Db2 Utilities)

DSNI002I ***csect-name* UNABLE TO START OBJECT TYPE *object-type* OBJECT NAME *object-name* REASON *reason-code* TYPE *resource-type* NAME *resource-name***

Explanation

The resource identified could not be started because it was unavailable. The resource could be a database, a table space, an index space, or a partition within a table space or an index space.

csect-name
The name of the control section that issued the message.

object-type* and *object-name
The type of object and the object name. If the Db2 catalog is unavailable, 'object-type' contains binary zeros and 'object-name' contains blanks.

reason-code
The reason code that explains why the resource was unavailable

resource-type* and *resource-name
The type and name of the resource that the message identifies. For an explanation of *resource-type* and *resource-name* values, see Appendix C, “Resource types,” on page 1171.

System action

The specified database, space, or partition is not started and remains in its current state. If there are other databases, spaces, or partitions to be started, they are processed normally.

User response

Correct the resource unavailable problem and reissue the -START command.

DSNI003I ***csect-name* UNABLE TO STOP OBJECT TYPE *object-type* OBJECT NAME *object-name* REASON *reason-code* TYPE *resource-type* NAME *resource-name***

Explanation

The identified object could not be stopped because a resource required to perform the stop was unavailable. The object could be a database, a table space, an index space, or a partition within a table space or an index space.

csect-name
The name of the control section that issued the message.

object-type* and *object-name
The type of object and the object name. If the Db2 catalog is unavailable, *object-type* contains binary zeros and *object-name* contains blanks.

reason-code
The reason code that explains why the resource was unavailable

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resource-type* and *resource-name
The type and name of the resource that the message identifies. For an explanation of *resource-type* and *resource-name* values, see Appendix C, "Resource types," on page 1171.

System action

The specified database, space, or partition is not stopped and remains in the current state. If there are other databases, spaces, or partitions to be stopped, they are processed normally.

User response

Correct the resource unavailable problem and reissue the -STOP command.

DSNI004I **RESOURCE HAS BEEN STOPPED TYPE *resource-type* NAME *resource-name***

Explanation

The identified resource could not be opened/closed, initialized, or was found to be in an inconsistent state. The resource has been stopped by Db2. If an open error occurred during Db2 startup, restart processing for the resource was deferred.

resource-type* and *resource-name
The type and name of the resource that the message identifies. For an explanation of *resource-type* and *resource-name* values, see Appendix C, "Resource types," on page 1171.

System action

The database, table space or index space is stopped by Db2.

User response

Previous messages provide information to allow you to determine the cause of the problem and the method of correcting it. Refer to them, and correct the problem. Then restart the database, table space, or index space using the -START command; and invoke the application again.

DSNI005I ***csect-name* LPL OR GRECP RECOVERY CANNOT BE DONE FOR *function-name* - ID = *function-id* OBJECT TYPE *object-type* OBJECT NAME *object-name* REASON *reason-code* TYPE *resource-type* NAME *resource-name***

Explanation

Resource recovery failed because of problems during group buffer pool recovery pending (GRECP) or logical page list (LPL) recovery.

csect-name
The name of the control section that issued the message.

function-name
The command or function that failed. Expected values are:

- START DATABASE COMMAND
- AUTOMATIC GRECP RECOVERY
- AUTOMATIC LPL RECOVERY

function-id
A decimal number that represents the recovery function.

object-name
The name of the object.

object-type
The type of object, which could be a table space, an index space, or a partition within a table space or index space.

reason-code
A numeric value that indicates the reason for the failure.

resource-type* and *resource-name
The type and name of the resource that the message identifies. For an explanation of *resource-type* and *resource-name* values, see Appendix C, "Resource types," on page 1171.

This message, in combination with message DSNI006I or DSNI022I, provides the LPL or GRECP recovery information for a recovery function that is identified by the *function-id*.

System action

The specified object is started but remains in a LPL or GRECP state. If there are other objects to be recovered, they are processed normally. Other status messages might be issued to the console, including:

- DSNI006I, which indicates the start of recovery
- DSNI022I, which provides the status of recovery operations
- DSNI051I, which indicates that second pass log apply has started

User response

Correct the problem that is specified by the reason code, and reissue the START DATABASE command.

Related information

DSNI006I
csect-name ASYNCHRONOUS GRECP OR LPL RECOVERY IN PROGRESS FOR *function-name* - ID *function-id* TYPE *object-type* NAME *object-name*

DSNI022I
csect-name LPL OR GRECP RECOVERY LOG APPLY FOR *function-name* - ID = *function-id* AT LOGPOINT *current-position* TO LOGPOINT *end-position* AT LOGPOINT IN LOCAL TIMESTAMP = *at-logpoint-timestamp* TO LOGPOINT IN LOCAL TIMESTAMP = *to-logpoint-timestamp*

DSNI051I
csect-name ASYNCHRONOUS GRECP OR LPL RECOVERY IN PROGRESS FOR *function-name* - ID = *function-id* TYPE *object-type* NAME *object-name*

Resource types
Type codes are associated with particular types of resources.

DSNI006I *csect-name* ASYNCHRONOUS GRECP OR LPL RECOVERY IN PROGRESS FOR *function-name* - ID *function-id* TYPE *object-type* NAME *object-name*

Explanation

Recovery has started for an object with group buffer pool recovery pending (GRECP) or logical page list (LPL) status.

csect-name
The name of the control section that issued the message.

function-name
The command or function that triggered the recovery. Expected values are:

- START DATABASE COMMAND
- AUTOMATIC GRECP RECOVERY
- AUTOMATIC LPL RECOVERY

function-id
A decimal number that represents the recovery function.

object-name
The name of the object.

object-type
The type of object, which could be a table space, an index space, or a partition within a table space or index space.

System action

The object is started and GRECP or LPL recovery is initiated. During LPL or GRECP recovery process, additional messages might be issued, including.

- DSNI005I, which indicates an error
- DSNI021I, which indicates successful completion
- DSNI051I, which indicates that second pass log apply has started

User response

No action is required.

You can issue a DISPLAY DATABASE command with the RESTRICT option for the specified table space or index space to determine whether the GRECP or LPL exception state has been cleared.

Related reference

-DISPLAY DATABASE (Db2) (Db2 Commands)

Related information

DSNI005I
csect-name LPL OR GRECP RECOVERY CANNOT BE DONE FOR *function-name* - ID = *function-id* OBJECT TYPE *object-type* OBJECT NAME *object-name* REASON *reason-code* TYPE *resource-type* NAME *resource-name*

DSNI021I
csect-name GRECP OR LPL RECOVERY FOR *function-name* - ID = *function-id* TYPE *object-type* NAME *object-name* HAS COMPLETED SUCCESSFULLY.

DSNI051I
csect-name ASYNCHRONOUS GRECP OR LPL RECOVERY IN PROGRESS FOR *function-name* - ID = *function-id* TYPE *object-type* NAME *object-name*

DSNI007I *csect-name* UNABLE TO START/ RECOVER BECAUSE UNABLE TO DIRECT READ A LOG RECORD LOGRBA *logrba*

Explanation

Unable to START (or RECOVER) because the necessary log records could not be accessed. Either an error occurred while attempting to allocate or open the log data set or an expected log record was not found on the log.

If the message is in response to a START command, issue the -DISPLAY command to determine which resource(s) was not started. If the message is in response to a RECOVER utility, the resource is the table space or index space that is the object of the RECOVER.

LOGRBA gives the log RBA of the log record that is unavailable.

System action

The resource is not started (or recovered) and remains in the current state. If this is a START command, the resources are processed normally if there are other databases or spaces to be started and they do not involve reading the log.

System programmer response

Run the print log map (DSNJU004) utility. This may be run with Db2 up or down. Find the data set that contains the requested RBA in the output of DSNJU004. If the required RBA is not in a listed data set, one of the following may have occurred:

- The data set was deleted from the bootstrap data set by a run of the change log inventory (DSNJU003) utility. In this case, rerun the utility to insert the missing data set name. Db2 must be down to run this utility.
- The bootstrap data set has been damaged. In this case, the BSDS must be restored from the dump that occurred with the most recent archive log data set. DSNJU003 must be run to supply changes that occurred during and after the last offload operation. Changes may be determined from the operator's console listing.

If a listed log data set contains the required RBA, this message will be preceded by one or more error messages from the log manager (DSNJ). See these messages for appropriate action.

User response

Resubmit the utility, or reissue the START command, when the problem with the log has been resolved.

Problem determination

Issue the -DISPLAY command to verify what got started.

DSNI008I **DATABASE VALIDATION PROCEDURE name COULD NOT BE LOADED**

Explanation

The database validation procedure identified by 'name' could not be loaded.

User response

Correct the name, and rerun the application.

DSNI009I ***csect-name*** **DATABASE EDIT PROCEDURE *name* COULD NOT BE LOADED**

Explanation

The database edit procedure identified by 'name' could not be loaded.

User response

Correct the name, and rerun the application.

DSNI010I **BROKEN PAGE ACCESSED TYPE *resource-type* NAME *resource-name* MODNAME *csect-name* CONN-ID *conn-id* CORR-ID *corr-id* LUW-ID *luw-id***

Explanation

The page identified by TYPE and NAME could not be accessed by *csect-name*, because it is marked as logically broken.

CONN-ID, CORR-ID, and LUW-ID

resource-type **and** ***resource-name***
The type and name of the resource that the message identifies. For an explanation of *resource-type* and *resource-name* values, see Appendix C, “Resource types,” on page 1171.

csect-name
The name of the control section that issued the message.

conn-id, ***corr-id***, **and** ***luw-id***
Identifiers for the thread that is involved in the problem. If *luw-id* is *, the thread originated at this site. Correlation IDs beginning with '0*nn*', where *nn* is a number from 01 - 28, identify system agents.

User response

If the TYPE is '00000300', use NAME to determine if the page is in an index space or a table space. Use the RECOVER or REPAIR utility to fix the damaged page. For information about RECOVER, see Recovering a page (Db2 Utilities). For information about REPAIR, see Repairing a damaged page (Db2 Utilities). If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

DSNI011I **PAGE TEMPORARILY UNAVAILABLE TYPE *resource-type* NAME *resource-name* MODNAME *modname* ERQUAL *erqual***

Explanation

The identified page has been temporarily marked as logically broken to prevent access until it can be recovered.

resource-type* and *resource-name
The type and name of the resource that the message identifies. For an explanation of *resource-type* and *resource-name* values, see Appendix C, "Resource types," on page 1171.

modname
The module named that called a page checking routine, which discovered an error in the page.

erqual
The trace identifier for the error in the page.

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

System action

Automatic recovery for the page has been scheduled. The current agent will abend with reason code '00C90105', and a dump will be taken. The page will be unavailable to this and other agents until the online recovery has completed successfully. Message DSNI010I will be issued, and a 'resource unavailable' condition will be returned to any agents that attempt to access the page. If the online recovery fails, the page will be marked as broken until it is repaired or recovered (see message DSNI012I).

User response

Save the dump. Watch for message DSNB215I (indicating successful recovery of the page), or DSNI012I (indicating failure of recovery of the page).

Related information

00C90105 (Db2 Codes)

DSNI010I
BROKEN PAGE ACCESSED TYPE *resource-type* NAME *resource-name* MODNAME *csect-name* CONN-ID *conn-id* CORR-ID *corr-id* LUW-ID *luw-id*

DSNI012I
PAGE LOGICALLY BROKEN TYPE *resource-type* NAME *resource-name* MODNAME *modname* ERQUAL *erqual*

DSNB215I
csect-name-ONLINE RECOVERY FOR AN INCONSISTENT PAGE HAS BEEN COMPLETED FOR DBNAME = *database-name*, SPACENAME = *space-name*, INSTANCE *instance-number*, PAGE NUMBER = X'*page-number*'

DSNI012I PAGE LOGICALLY BROKEN TYPE *resource-type* NAME *resource-name* MODNAME *modname* ERQUAL *erqual*

Explanation

The identified page is logically incorrect. Additional attempts to access the page will be denied.

resource-type* and *resource-name
The type and name of the resource that the message identifies. For an explanation of *resource-type* and *resource-name* values, see Appendix C, "Resource types," on page 1171.

modname
The name of the log apply module that discovered an error in the page.

erqual
The trace identifier for the error in the page. X'0000' indicates that an abend occurred during online recovery or RECOVER utility. The page is marked as broken, and recovery fails.

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

System action

The page is marked as logically broken, a 04E abend with reason code 00C90102 is issued, and a dump is taken. The page will be unavailable to this and other agents until it is repaired.

Operator response

Notify the system programmer.

System programmer response

See the Explanation section of this message.

User response

Save the dump for analysis by IBM Support. Copy the table space or index space to another data set for later analysis by IBM Support. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Related information

00C90102 (Db2 Codes)

DSNI013I *csect-name* POTENTIALLY INCONSISTENT DATA REASON *reason* ERQUAL *erqual* TYPE

resource-type* NAME *resource-name* CONN-ID *conn-id* CORR-ID *corr-id* LUW-ID *luw-id

Explanation

This message identifies a page with potentially inconsistent data. This message is issued for each page involved in the current data manager operation.

csect-name
The name of the control section that issued the message.

resource-type* and *resource-name
The type and name of the resource that the message identifies. For an explanation of *resource-type* and *resource-name* values, see Appendix C, "Resource types," on page 1171.

erqual
Identifies the specific abend in the CSECT that caused this message to be issued. This information and the reason code are used by IBM Software Support to identify the cause of the problem.

conn-id
The connection identifier of the agent that is involved in the problem.

corr-id
The correlation identifier of the agent that is involved in the problem. Correlation IDs 01 - 028, identify system agents.

luw-id
The logical unit of work identifier of the agent that is involved in the problem. If the thread originated at this site, the value of *luw-id* is *.

For further information, see the Explanation section for the abend reason code specified in this message.

System action

The job is abended shortly after this message appears.

Operator response

Collect the console output from the system on which the job was run. Save this output for use in problem determination.

System programmer response

See the Problem Determination section for the specific abend reason code.

User response

Notify the system programmer.

Problem determination

See the System Programmer Response section of the abend reason code specified in this message.

DSNI014I ***csect-name* DATA IN USE DURING ABEND REASON 00C90101 ERQUAL *error-qualifier* TYPE *resource-type* NAME *resource-name* CONN-ID *connection-id* CORR-ID *correlation-id* LUW-ID *luw-id***

Explanation

This message identifies a page that was in use at the time an abend condition occurred with reason code 00C90101. A separate instance of this message is issued for each page involved in the current operation.

csect-name
The name of the control section that issued the message.

error-qualifier
The abend in the control section that caused this message to be issued.

resource-type* and *resource-name
The type and name of the resource that the message identifies. For an explanation of *resource-type* and *resource-name* values, see Appendix C, "Resource types," on page 1171.

connection-id
The connection identifier of the agent that is involved in the problem.

correlation-id
The correlation identifier of the agent that is involved in the problem. Correlation IDs that begin with 001 through 028, inclusive, identify system agents.

luw-id
The logical unit of work identifier of the agent that is involved in the problem. If the thread originated at this site, the value of *luw-id* is a *.

System action

The job abends with reason code 00C90101 after this message appears.

Operator response

Collect the console output from the system on which the job was run for the period of time spanning the failure. Save this output for use in problem determination.

System programmer response

See abend reason code 00C90101 for more information.

User response

Notify the system programmer.

Problem determination

In general, the data in these pages is valid. However, if problems are reported that repeatedly involve the same pages or if the same pages are reported by other abends, analyze the set of pages involved.

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Related information

00C90101 (Db2 Codes)

DSNI015I **OBJECT name IS ALREADY STARTED FOR RW ACCESS. THE OBJECT WILL REMAIN STARTED FOR RW ACCESS**

Explanation

The -START DATABASE command with the ACCESS(FORCE) keyword was entered, but the object specified was already started for read/write access.

DSNI016I **RESOURCE TYPE *resource-type* NAME *resource-name* MUST FIRST BE STOPPED BEFORE IT CAN BE STARTED IN A DIFFERENT ACCESS MODE**

Explanation

When issuing the -START DATABASE command on the ROSHARE OWNER system, the object to be started must first be stopped before changing access modes. For example, if a table space in a database defined as ROSHARE OWNER is started for RW access, before it can be started for RO access it must be stopped via the -STOP DATABASE command. It can then be started for RO access via the -START DATABASE command.

resource-type* and *resource-name
The type and name of the resource that the message identifies. For an explanation of *resource-type* and *resource-name* values, see Appendix C, “Resource types,” on page 1171.

System action

The -START DATABASE command is not allowed to proceed.

User response

Issue a -STOP DATABASE command to stop the object before attempting to start it.

Severity

8 (error)

DSNI017I **RESOURCE TYPE *resource-type* NAME *resource-name* IS INCONSISTENT DUE TO ONE OR MORE PENDING STATES**

Explanation

There are two possible reasons for this message:

1. The header page of a table space, index, or partition belonging to a database defined as ROSHARE OWNER could not be marked as consistent during the processing of the STOP DATABASE command because one or more of the following was true:
   - The table space, index, or partition is in recovery pending status.
   - The table space, index, or partition is in check pending status.
   - The table space, index, or partition has pages in the logical page list (LPL).
   - The table space, index, or partition status has a utility in progress (UTUT status on the output from a DISPLAY DATABASE command).
   - The table space, index, or partition has a utility in progress that allows read-only access (UTRO on the output from a DISPLAY DATABASE command).
   - An I/O error range exists.
2. A retained lock is held on the table space, index, or partition. The retained lock could be signifying a pending status.

If the STOP DATABASE command was issued without specifying the SPACENAM parameter, then one or more of the conditions stated above is true for one or more table spaces, indexes, or partitions in the specified database.

resource-type* and *resource-name
The type and name of the resource that the message identifies. For an explanation of *resource-type* and *resource-name* values, see Appendix C, “Resource types,” on page 1171.

System action

For case 1, if the STOP DATABASE command was specified with the SPACENAM parameter, the table space, index, or partition is stopped. Db2 does not allow access to an inconsistent table space, index, or partition by any ROSHARE READ system.

For case 2, no access to an inconsistent table space, index, or partition is allowed until the retained lock is released by the failed system at completion of its restart.

User response

Issue a DISPLAY DATABASE command to display the status of the object in question. Resolve the pending states and then reissue the STOP DATABASE command to ensure that the consistency indicator is reset.

Severity

4 (warning)

DSNI018I **UNABLE TO GET LOCK FOR RESOURCE TYPE *resource-type* NAME *resource-name*. WILL RETRY TO GET LOCK.**

Explanation

The identified resource could not be locked because of lock contention. The lock request is made again for this resource.

resource-type* and *resource-name
The type and name of the resource that the message identifies. For an explanation of *resource-type* and *resource-name* values, see Appendix C, "Resource types," on page 1171.

System action

The lock request is made again for the specified resource.

Severity

0 (informational)

Related concepts

Lock contention, suspension, timeout, and deadlock (Db2 Performance)

Objects that are subject to locks (Db2 Performance)

DSNI019I **THE STOP COMMAND FOR OBJECT name WAS OVERRIDDEN BY A START FORCE. THE STOP COMMAND IS IGNORED.**

Explanation

The object identified by 'name' was not stopped because a START FORCE command on this object was subsequently issued and processed.

This message is informational only.

System action

The object is not stopped.

Severity

0 (informational)

DSNI020I ***csect-name* UNABLE TO DRAIN RESOURCE TYPE *resource-type* NAME *resource-name*. WILL RETRY DRAINING THE RESOURCE.**

Explanation

The identified resource could not be drained. The drain request is made again for this resource.

csect-name
The name of the control section that issued the message.

resource-type* and *resource-name
The type and name of the resource that the message identifies. For an explanation of *resource-type* and *resource-name* values, see Appendix C, "Resource types," on page 1171.

System action

The drain request is made again for the specified resource.

Related concepts

Claims and drains (Db2 Performance)

DSNI021I ***csect-name* GRECP OR LPL RECOVERY FOR *function-name* - ID = *function-id* TYPE *object-type* NAME *object-name* HAS COMPLETED SUCCESSFULLY.**

Explanation

Recovery has completed successfully.

csect-name
The name of the control section that issued the message.

function-name
The function that triggered the recovery: Expected values are:

- START DATABASE COMMAND
- AUTOMATIC GRECP RECOVERY
- AUTOMATIC LPL RECOVERY

function-id
A decimal number that represents the recovery function.

object-type
The type of object, which could be a table space, an index space, or a partition within a table space or index space.

object-name
The name of the object.

This message is always preceded by message DSNI006I, which indicates the beginning of the LPL or GRECP recovery for the object. In addition, this message might be preceded by message DSNI051I, which indicates the beginning of second pass LPL or GRECP recovery for the object.

System action

The object is started normally. The group buffer pool recovery pending (GRECP) or logical page list (LPL) exception state is cleared.

User response

No action is required.

Related information

DSNI006I
csect-name ASYNCHRONOUS GRECP OR LPL RECOVERY IN PROGRESS FOR *function-name* - ID *function-id* TYPE *object-type* NAME *object-name*

DSNI051I
csect-name ASYNCHRONOUS GRECP OR LPL RECOVERY IN PROGRESS FOR *function-name* - ID = *function-id* TYPE *object-type* NAME *object-name*

DSNI022I ***csect-name* LPL OR GRECP RECOVERY LOG APPLY FOR *function-name* - ID = *function-id* AT LOGPOINT *current-position* TO LOGPOINT *end-position* AT LOGPOINT IN LOCAL TIMESTAMP = *at-logpoint-timestamp* TO LOGPOINT IN LOCAL TIMESTAMP = *to-logpoint-timestamp***

Explanation

This message is issued periodically to show the progress of group buffer pool recovery pending (GRECP) or logical page list (LPL) recovery.

csect-name
The name of the control section that issued the message.

function-name
The function that triggered the recovery: Expected values are:

- START DATABASE COMMAND
- AUTOMATIC GRECP RECOVERY
- AUTOMATIC LPL RECOVERY

function-id
A decimal number that represents the recovery function.

current-position
The log point of the log record that is being processed when message DSNI022I is issued. This value is an RBA in a non-data sharing environment or an LRSN in a data sharing environment.

end-position
The log point of the last log record that will be applied in this recovery. This value is an RBA in a non-data sharing environment or an LRSN in a data sharing environment.

at-logpoint-timestamp
The local timestamp of the log point of the log record that is being processed when message DSNI022I is issued. If the log point is an RBA, the string ********** is displayed.

to-logpoint-timestamp
The local timestamp of the log point of the last log record that will be applied in this recovery. If the log point is an RBA, the string ********** is displayed.

The local timestamps are in the following format:

```
hh:mm:ss month dd, yyyy
```

hh*:*mm*:*ss
The time portion of the timestamp, expressed as hours, minutes, and seconds.

month
An alphanumeric abbreviation for the month. Possible values are:

Month	*month* value in the local timestamp
January	JAN
February	FEB
March	MAR
April	APR
May	MAY

Month	*month* value in the local timestamp
June	JUN
July	JUL
August	AUG
September	SEP
October	OCT
November	NOV
December	DEC

dd
The day of the month.

yyyy
The year.

System action

Processing continues.

During the LPL or GRECP recovery process, additional messages might be issued, including:

- DSNI005I, which indicates an error
- DSNI006I, which indicates the start of recovery
- DSNI021I, which indicates successful completion
- DSNI051I, which indicates that second pass log apply has started

User response

No action is required.

Related information

DSNI005I
csect-name LPL OR GRECP RECOVERY CANNOT BE DONE FOR *function-name* - ID = *function-id* OBJECT TYPE *object-type* OBJECT NAME *object-name* REASON *reason-code* TYPE *resource-type* NAME *resource-name*

DSNI006I
csect-name ASYNCHRONOUS GRECP OR LPL RECOVERY IN PROGRESS FOR *function-name* - ID *function-id* TYPE *object-type* NAME *object-name*

DSNI021I
csect-name GRECP OR LPL RECOVERY FOR *function-name* - ID = *function-id* TYPE *object-type* NAME *object-name* HAS COMPLETED SUCCESSFULLY.

DSNI051I
csect-name ASYNCHRONOUS GRECP OR LPL RECOVERY IN PROGRESS FOR *function-name* - ID = *function-id* TYPE *object-type* NAME *object-name*

DSNI023I *csect-name* PAGE SET *dbnam.psnam* PART *part* IS *status* ON BEHALF OF UR *urid*. BACKOUT TO *logpoint* IS REQUIRED.

Explanation

The value of *status* is either RESTP (Restart Pending) or AREST (Advisory Restart Pending). This message indicates that the named UR has backout work pending against the named page set or partition. The backout work for this UR against this page set or partition will be complete after backward processing of the log reaches the identified logpoint. The value for *logpoint* will be 'RBA *rba*' for non-datasharing and 'LRSN *lrsn*' for datasharing environments.

For non-partitioned page sets, the partition given in the message is the string *n/a*.

DSNI024I *csect-name* BACKOUT PROCESSING IS COMPLETE FOR PAGE SET *dbnam.psnam* PART *part*.

Explanation

This message indicates that backout processing is complete for the named table space, index space, or partition. If the object was in restrictive restart pending state, that state is lifted. If the object was in an advisory restart pending state, locks held on the object on behalf of postponed abort URs by the Db2 member issuing the message are released. The advisory restart pending state is lifted if the Db2 member issuing the message is the only member still contributing to the state.

For non-partitioned page sets, the partition given in the message is the string "n/a".

DSNI025I *csect-name* THE FAST LOG APPLY PROCESS REQUIRES *aaaaaaaa* BYTES OF STORAGE, BUT GOT ONLY *bbbbbbbb* BYTES

Explanation

The Fast Log Apply process could not obtain all the required storage. However, the storage acquired is enough for the Fast Log Apply process to continue.

System action

The Fast Log Apply process continues with the smaller amount of storage for the log buffers.

Severity

0 (informational)

DSNI026I ***csect-name*** **THE FAST LOG APPLY PROCESS IS DISABLED BECAUSE ALL OF THE ALLOWABLE STORAGE IS EXHAUSTED**

Explanation

There is no ssnmDBM1 storage available for the Fast Log Apply process to use. There are too many jobs (RECOVER or -START DB command) running in parallel.

System action

The recovery of the requested objects continues without the Fast Log Apply process.

Severity

0 (informational)

DSNI027I ***csect-name*** **THE FAST LOG APPLY PROCESS IS DISABLED BECAUSE IT IS UNABLE TO ACQUIRE THE MINIMUM REQUIRED STORAGE**

Explanation

There is not enough ssnmDBM1 storage available or reserved for the Fast Log Apply process to use.

System action

The recovery of the requested objects continues without the Fast Log Apply process.

Severity

0 (informational)

DSNI028I ***csect-name*** **THE NUMBER OF QUALIFIED LOG RECORDS READ DURING THE FAST LOG APPLY PROCESS IS *log-records* AND THE NUMBER OF FAST LOG APPLY BUFFERS PROCESSED ARE *fla-buffers***

Explanation

This informational message is issued during the Fast Log Apply process. *log-records* indicates the number of log records that have been applied during the Fast Log Apply process. *fla-buffers* indicates the number of buffers used by the Fast Log Apply process.

Severity

0 (informational)

DSNI029I ***csect-name*** **THE FAST LOG APPLY PROCESS IS ACTIVE AND THE AVAILABLE *ssnm*DBM1 STORAGE IS *bytes* BYTES**

Explanation

This informational message is issued during the Fast Log Apply process for member *ssnm*. There is sufficient storage for the Fast Log Apply process to continue, and the remaining amount of available storage is displayed in hexadecimal as *bytes*.

Severity

0 (informational)

DSNI030I ***csect-name*** **BACKOUT PROCESSING IS CONTINUING BEYOND THE REQUESTED LIMIT DUE TO CATALOG OR DIRECTORY ACTIVITY OF UR *urid*.**

Explanation

The number of log records requested to be processed during restart's backward phase have been processed. Under other circumstances further backout processing would be postponed. However, because the indicated UR has catalog or directory updates that are not backed out yet (and because backout against catalog or directory page sets cannot be postponed), backout processing is continuing. It will continue until this UR's backout is complete.

System action

Backout processing continues.

DSNI031I ***csect-name*** **- LOCK ESCALATION HAS OCCURRED FOR RESOURCE NAME = *resource-name*, LOCK STATE = *lock-state*, PLAN NAME : PACKAGE NAME = *plan-name*:*package-name*, COLLECTION-ID = *collection-id*, STATEMENT NUMBER = *statement-number*, CORRELATION-ID = *correlation-id*, CONNECTION-ID = *connection-id*, LUW-ID = *luw-id*, THREAD-INFO = *thread-information*, PARTITION-INFO = *partition-info***

Explanation

Lock escalation has occurred for the specified object.

csect-name
The name of the control section that issued the message.

resource-name
The name of the escalated resource. The format of *resource-name* depends on the type of table space:

Simple or partitioned table spaces
database-name.tablespace-name

Segmented table space
Either *creator-name.table-name* or *DBID.OBID* of the table

lock-state
The lock state of the escalated resource, after escalation.

plan-name
The name of the executing plan that is associated with this thread.

package-name
The name of the executing package that is associated with this thread, if one exists.

collection-id
The collection identifier of the package resource, if one exists.

statement-number
The statement number of the executing SQL statement that is associated with this plan.

correlation-id
The correlation identifier of the thread that is associated with the escalated resource.

connection-id
The connection identifier of the thread that is associated with the escalated resource.

luw-id
The logical unit of work identifier of the thread that is associated with the escalated resource.

thread-information
Information about the thread. The information is presented in a colon-delimited list that contains the following segments:

- The primary authorization ID that is associated with the thread.
- The name of the user's workstation.
- The ID of the user.
- The name of the application.
- The statement type for the previously executed statement: dynamic or static.
- The statement identifier for the previously executed statement, if available. The statement identifier can be used to identify the particular SQL statement. For static statements, the statement identifier correlates to the STMT_ID column in the SYSIBM.SYSPACKSTMT table. For dynamic statements, the statement identifier correlates to the STMT_ID column in the DSN_STATEMENT_CACHE_TABLE table. That statement might not have contributed to the current failure.
- The name of the role that is associated with the thread.
- The correlation token that can be used to correlate work at the remote system with work performed at the Db2 subsystem. The correlation token, if available, is enclosed in '<' and '>' characters, and contains three components, separated by periods:
  - A 3 to 39 character IP address.
  - A 1 to 8 character port address.
  - A 12 character unique identifier.

  An asterisk (*) in any segment indicates that the information is not available.

partition-info
The table space partitions for which lock escalation occurred.

System action

Processing continues.

User response

No action is required.

Related concepts
Lock escalation (Db2 Performance)

DSNI032I ***csect-name*** **CANCEL THREAD NOBACKOUT COMMAND FAILED FOR THE THREAD =** ***token*** **REASON =** ***reason***

Explanation

Db2 displays this message when it cannot grant a request to cancel a thread without backing out data changes. The reason code explains why the request was rejected.

token
Identifies a thread whose processing you requested to cancel. The token is a 1- to 15-digit decimal number.

reason
Indicates the reason why the command failed.

System action

Processing terminates normally.

User response

The reason code specifies the action to be taken.

DSNI033I ***csect-name* PAGE SET *dbname.psname* PART *part-number* IS MARKED REFP AND *status* ON BEHALF OF UR *ur-id*. RECOVERY TO *logout* IS REQUIRED.**

Explanation

No further backout processing will be attempted on the specified page set or partition because backout for the specified unit of recovery was canceled. The specified page set or partition is placed in refresh-pending (REFP) status.

csect-name
The name of the control section that issued the message.

dbname.psname
The database and page set.

part-number
The value that identifies the partition or data set.

status
Additional status set on the specified object.

ur-id
The unit of recovery.

logout
RBA or LRSN value.

User response

If the object in refresh-pending status is a table space, you can resolve the REFP,LPL state of the specified page set or partition in one of the following ways:

- Run the RECOVER utility to perform a point-in-time recovery.
- Run the LOAD utility with the REPLACE option to resolve the REFP,LPL state.

If the page set is an index space, run the REBUILD INDEX utility to perform a point-in-time recovery and resolve the REFP,RBDP or REFP,LPL status. You can use the RBA or LRSN value in this message for point-in-time recovery.

The DSNI033I message might be issued multiple times for a page set. (The message is issued once per unit of recovery.) If you run the RECOVER utility with point-in-time recovery to resolve the exception states, use the highest of the *logout* points.

Severity

0 (informational)

Related reference
Advisory or restrictive states (Db2 Utilities)
RECOVER (Db2 Utilities)
REBUILD INDEX (Db2 Utilities)

DSNI034I ***csect-name* TABLE SPACE *table-space-name* IS IN AUX WARNING STATE**

Explanation

Db2 attempted to recover table space *table-space-name*, but no log records exist because the table space was created with the LOG NO option. The table space is placed in an auxiliary warning state. You can use SQL statements to update the LOB values that are in error or to delete the row that contains the LOB values. In addition, you can use SQL statements to access valid LOBs. However, you cannot use SQL statements to retrieve a LOB value that is not valid.

System action

Db2 marks the LOB values that are in error as not valid. Processing continues.

Programmer response

Use SQL statements to update or delete the LOB values in error. Use the CHECK LOB utility to verify that all errors were corrected and to reset the auxiliary warning state. The auxiliary warning state can also be reset using the REPAIR utility with SET NOAUXWARN.

Severity

0 (informational)

DSNI036I ***csect-name* THE REAL-TIME STATISTICS COLLECTION PROCESS IS DISABLED**

Explanation

An error prevents Db2 from externalizing the in-memory statistics. The error is generally a persistent error and must be remedied before the process can be enabled. Look for prior messages to identify the nature of the problem.

System action

The statistics database is implicitly stopped and no further attempt will be made to externalize the in-memory statistics.

Operator response

Notify the system programmer.

System programmer response

Inspect the console for prior messages and refer to those messages for problem determination.

DSNI037I ***csect-name*** **THE REAL-TIME STATISTICS COLLECTION PROCESS COULD NOT ACCESS AN OBJECT IN THE REAL-TIME STATISTICS DATABASE**

Explanation

An error prevents Db2 from externalizing the in-memory statistics. An attempt failed to insert, update, or delete a row in the statistics database. The error is generally transient (lock timeout or resource unavailable). If the operation is retried, it is likely to succeed.

System action

The statistics are kept in-memory until the next opportunity to externalize them.

DSNI038I ***csect-name*** **THE REAL-TIME STATISTICS COLLECTION PROCESS IS ENABLED**

Explanation

The statistics database started successfully. The required object descriptors in the statistics database exist and have the correct attributes. Db2 proceeds to externalize in-memory statistics for all modified objects.

System action

The database is started R/w.

Severity

0 (informational)

DSNI040I ***csect-name*** **RESTORE SYSTEM UTILITY PROCESSING LOG RANGE FROM** ***rba/lrsn xxxxxx*** **TO** ***yyyyyy***

Explanation

This message periodically shows the progress of system level recovery made by the RESTORE SYSTEM utility. In non-data sharing, the log range is RBA. In data sharing, the log range represents LRSN value. The value for *xxxxxxxx* is the RBA or LRSN value of the current log record being processed and the *yyyyyyyy* value is the RBA or LRSN of the last log record to be processed by the RESTORE SYSTEM utility.

System action

System Level Point-In-Time recovery continues.

Severity

0 (informational)

DSNI041I ***csect-name*** **START ACCESS(FORCE) CANNOT BE ISSUED AGAINST TARGET** ***obj-type obj-qual.obj-name part*** **DUE TO STOPPED UTILITIES ON VERSION** ***version-number*****. REQUEST IS REJECTED.**

Explanation

The object cannot be started due to outstanding utilities on a different version. The status of the object is unchanged.

version-number is the version on which the utility was running.

obj-type is table space or index space.

obj-qual is the database name.

obj_name is the table space or index space name.

part represents the partition number for a partitioned table space.

System action

The request is rejected.

User response

Use the DISPLAY UTILITY command to see what utilities are outstanding. Issue the -START DATABASE ACCESS(FORCE) command on the same version as the version on which the stopped utility was running. If there is more than one utility outstanding on the object and the utilities were submitted on a different release of Db2, start the correct version of Db2 and use the -TERM UTILITY command to terminate each utility.

DSNI042I ***csect-name*** **- PAGE SET HEADER RBA** ***function-name*****- ID** ***function-id*** **DB ID** ***database-id*****. PS ID** ***pageset-id*** **PART #** ***partition-number*** **RBA** ***header-page*** **RBA**

Explanation

This informational message displays the header page RBA that is used to determine the LPL or GRECP recovery range for the specified page set. It is displayed one time for each LPL recovery, for each page set and each data sharing group.

csect-name
The name of the control section that issued the message.

command-name
The name of the z/OS MVS command that was issued: START, STOP, or MODIFY. The MODIFY command refreshes the Db2 health monitor.

function-name
The name of the function, such as a START DATABASE command, that was issued.

function-id
A decimal number that represents the function.

database-id
The ID of the database where the page set exists.

pageset-id
The ID of the page set where the pages exist.

partition-number
The number of the partition where the pages exist.

header-page
The RBA value that is on the header page of the page set.

System action

The recovery continues.

User response

Wait for message DSNI021I, which indicates the end of recovery, or for message DSNI005I, which indicates an error occurred during recovery.

Related information

DSNI005I
csect-name LPL OR GRECP RECOVERY CANNOT BE DONE FOR *function-name* - ID = *function-id* OBJECT TYPE *object-type* OBJECT NAME *object-name* REASON *reason-code* TYPE *resource-type* NAME *resource-name*

DSNI021I
csect-name GRECP OR LPL RECOVERY FOR *function-name* - ID = *function-id* TYPE *object-type* NAME *object-name* HAS COMPLETED SUCCESSFULLY.

DSNI043I *csect-name* - MERGED LOG APPLY RANGE *function-name*-ID *function-id* MEMBER ID *member-id* FROM *type sequence-start* TO *type sequence-end*

Explanation

This informational message displays the broad LRSN or RBA range, merged from all members of the data sharing group. The range is used to determine the LPL or GRECP recovery range for the specified page set. It is displayed on time for each LPL recovery, for each member.

csect-name
The name of the control section that issued the message.

command-name
The name of the z/OS MVS command that was issued: START, STOP, or MODIFY. The MODIFY command refreshes the Db2 health monitor.

function-name
The name of the function, such as a START DATABASE command, that was issued.

function-id
A decimal number that represents the function.

member-id
The numeric identifier for the data sharing member.

type
An indicator of the log record sequence number referenced in the message:

LRSN
The log record sequence number is used in a data sharing environment.

RBA
The relative byte address is used in a non-data sharing environment.

sequence-start
Indicator of the beginning of the sequence identified by *type*.

sequence-end
Indicator of the end of the sequence identified by *type*.

System action

The recovery continues.

User response

Wait for message DSNI021I, which indicates the end of recovery, or for message DSNI005I, which indicates an error occurred during recovery.

Related information

DSNI005I

csect-name LPL OR GRECP RECOVERY CANNOT BE DONE FOR *function-name* - ID = *function-id* OBJECT TYPE *object-type* OBJECT NAME *object-name* REASON *reason-code* TYPE *resource-type* NAME *resource-name*

DSNI021I
csect-name GRECP OR LPL RECOVERY FOR *function-name* - ID = *function-id* TYPE *object-type* NAME *object-name* HAS COMPLETED SUCCESSFULLY.

DSNI044I ***csect-name*- PAGE LOG APPLY RANGE *function-name* -ID *function-id* DB ID *database-id* PS ID *pageset-id* PART # *partition-number* MEMBER ID *member-id* FROM PAGE # *from-page* TO PAGE # *to-page* FROM *type sequence-start* TO *type sequence-end***

Explanation

This informational message displays the LRSN or RBA range that is used to determine LPL or GRECP recovery range for the specified page set in the data sharing group member.

csect-name
The name of the control section that issued the message.

command-name
The name of the z/OS MVS command that was issued: START, STOP, or MODIFY. The MODIFY command refreshes the Db2 health monitor.

function-name
The name of the function, such as a START DATABASE command, that was issued.

function-id
A decimal number that represents the function.

database-id
The ID of the database where the page set exists.

pageset-id
The ID of the page set where the pages exist.

partition-number
The number of the partition where the pages exist.

member-id
The numeric identifier for the data sharing member.

from-page
The beginning page number for the range where the log is to be applied.

to-page
The ending page number for the range where the log is to be applied.

type
An indicator of the log record sequence number referenced in the message:

LRSN
The log record sequence number is used in a data sharing environment.

RBA
The relative byte address is used in a non-data sharing environment.

sequence-start
An indicator of the beginning of the sequence identified by *type*.

sequence-end
An indicator of the end of the sequence identified by *type*.

System action

The recovery continues.

User response

Wait for message DSNI021I, which indicates the end of recovery, or for message DSNI005I, which indicates an error occurred during recovery.

Related information

DSNI005I
csect-name LPL OR GRECP RECOVERY CANNOT BE DONE FOR *function-name* - ID = *function-id* OBJECT TYPE *object-type* OBJECT NAME *object-name* REASON *reason-code* TYPE *resource-type* NAME *resource-name*

DSNI021I
csect-name GRECP OR LPL RECOVERY FOR *function-name* - ID = *function-id* TYPE *object-type* NAME *object-name* HAS COMPLETED SUCCESSFULLY.

DSNI045I **OPEN FAILED FOR DATABASE *db-name* SPACE NAME *ps-name* PART *part-num* REASON *reason-code***

Explanation

The local member failed to physically or logically open the indicated object.

db-name
The database name for the page set that failed to open.

ps-name
The name of page set that failed to open.

part-num
The partition that failed to open. *part-num* is 0 for non-partitioned page sets.

reason-code
The reason code for the failure.

System action

Processing continues.

Operator response

1. Ensure that the buffer pool is activated.
2. Use the *reason-code* to determine the cause of the failure.
3. Correct the error and re-issue the command.

DSNI046I ***csect-name* OBJECT IN ERROR REASON *reason-code* ERQUAL *error-qualifier* NAME *object-name* DBID *database-id* OBID *object-id* LRSN *log-record***

Explanation

An error occurred during processing of a table space, table space partition, index space, index partition, or logical index partition. One of the following conditions occurred:

- An error occurred when Db2 processed a DBET exception state for a table space, index space, or partition of a partitioned object.
- An error occurred when Db2 was unable to access a page set in backward log recovery phase during restart.

csect-name
The name of the control section that issued the message.

reason-code
The Db2 reason code that is listed in the dump that accompanies this message.

error-qualifier
The abend in the control section that caused this message to be issued.

object-name
The name of the table space or index space that encountered the problem. A partition number is included where applicable.

database-id
The database identifier (DBID).

object-id
The object identifier (OBID).

log-record
The LRSN or RBA of the log record that was being processed when the error occurred. If no log record was being processed, this value is blank.

System action

The system action depends on the situation in which the error occurred:

Accessing a page in backward log recovery phase
Db2 places the table space or index space in RECP and DBETE status. It then abends and generates a dump. Db2 tolerates the page set access error so that it can restart.

Processing a DBET exception state
Db2 places the table space or index space in RECP, RBDP, or PSRBD status and DBETE status. It then abends and generates a dump. Db2 tolerates the exception state error so that it can restart or the RESTORE SYSTEM utility can continue.

User response

Issue the appropriate DISPLAY command to see the status of the object. Use one of the following methods to reset the DBETE and RECP, RBDP, or PSRBD statuses:

- Use the RECOVER utility or the LOAD utility with the REPLACE option to recover a table space or index space.
- Use the REBUILD INDEX utility to rebuild an index space.
- Use the START DATABASE command with the following options:

```
START DATABASE(database-name)
   SP(space-name) ACCESS(FORCE)
```

Contact IBM Software Support to report the problem. Db2 log records need to be analyzed in order to diagnose the cause of the problem, and determine if the exception state error needs to be handled.

Related concepts
Db2 reason codes (Db2 Codes)
Related reference
-START DATABASE (Db2) (Db2 Commands)
LOAD (Db2 Utilities)
REBUILD INDEX (Db2 Utilities)
RECOVER (Db2 Utilities)

DSNI047I ***csect-name* UNABLE TO ACCESS OBJECT TYPE *object-type* OBJECT NAME *object-name* REASON *reason-code* TYPE *resource-type* NAME *resource-name***

Explanation

The resource identified could not be accessed because it was unavailable. The resource could be a database,

a table space, an index space, or a partition within a table space or index space.

csect-name
The name of the control section that issued the message.

object-type* and *object-name
The type and name of the object. If the Db2 catalog is unavailable,*object-type* contains binary zeros and *object-name* contains blanks.

reason-code
The reason code for the unavailable resource.

resource-type* and *resource-name
The type and name of the resource that the message identifies. For an explanation of *resource-type* and *resource-name* values, see Appendix C, "Resource types," on page 1171.

System action

The specified database, space, or partition is not accessed, and remains in its current state. If there are other databases, spaces, or partitions to be accessed, they are processed normally.

User response

Correct the resource unavailable problem and reissue the -ACCESS DATABASE command.

Related information

Resource types
Type codes are associated with particular types of resources.

DSNI048I **GROUP BUFFERPOOL DEPENDENCY CANNOT BE REMOVED FOR DATABASE *db-name* SPACE NAME *ps-name* PART *part-num* REASON *reason-text***

Explanation

Db2 failed to remove group buffer pool dependency for the indicated object.

db-name
The database name for the page set that failed to be removed from group buffer pool dependency.

ps-name
The name of page set that failed to be removed from group buffer pool dependency.

part-num
The partition that failed to be removed from group buffer pool dependency. *part-num* is 0 for non-partitioned page sets.

reason-text
Text that indicates one of the following reasons for the failure:

- DRAIN LOCK FAILURE
- RETAINED LOCKS EXIST
- REMOTE CLAIMERS EXIST
- LOCAL CLAIMERS EXIST
- CASTOUT PROBLEM

System action

Processing continues.

Operator response

Determine the cause of the failure from the *reason-text* by using the DISPLAY DATABSE command with the LOCKS or CLAIMERS keyword. Reissue the ACCESS DB MODE(NGBPDEP) command after the indicated object is free.

Related reference

-DISPLAY DATABASE (Db2) (Db2 Commands)
-ACCESS DATABASE (Db2) (Db2 Commands)

DSNI049I ***csect-name* GRECP OR LPL RECOVERY FOR *function-name* - ID = *function-id* HAS COMPLETED.**

Explanation

The group buffer pool recovery pending (GRECP) or logical page list (LPL) exception state of table spaces or index spaces in a recovery function has been completed.

csect-name
The name of the control section that issued the message.

function-name
The function that triggered the recovery: Expected values are:

- START DATABASE COMMAND
- AUTOMATIC GRECP RECOVERY
- AUTOMATIC LPL RECOVERY

function-id
A decimal number that represents a recovery function. This number corresponds to the function ID number in DSNI006I, DSNI021I, and DSNI051I messages.

Messages DSNI006I (beginning of recovery), DSNI051I (beginning of second pass recovery), and DSNI021I (end of recovery) report about recovering a single table space or index space within a recovery

function. A recovery function can recover multiple objects.

Message DSNI049I indicates the end of a recovery function.

System action

The recovery function that is identified by *function-name* completes normally.

Operator response

No action is required.

Related reference

-START DATABASE (Db2) (Db2 Commands)

Related information

DSNI006I
csect-name ASYNCHRONOUS GRECP OR LPL RECOVERY IN PROGRESS FOR *function-name* - ID *function-id* TYPE *object-type* NAME *object-name*

DSNI021I
csect-name GRECP OR LPL RECOVERY FOR *function-name* - ID = *function-id* TYPE *object-type* NAME *object-name* HAS COMPLETED SUCCESSFULLY.

DSNI051I
csect-name ASYNCHRONOUS GRECP OR LPL RECOVERY IN PROGRESS FOR *function-name* - ID = *function-id* TYPE *object-type* NAME *object-name*

DSNI050I PAGE LOGICALLY BROKEN DURING FLASH COPY WITH CONSISTENCY TYPE *resource-type* NAME *resource-name* DBID *dbid* OBID *obid* PAGE RBA OR LRSN *page-rba-or-lrsn* LOG RBA OR LRSN *log-rba-or-lrsn* MODNAME *modname* ERQUAL *erqual*

Explanation

The identified page is logically incorrect. Additional attempts to access the page will be denied.

resource-type* and *resource-name
The type and name of the resource that the message identifies. For an explanation of *resource-type* and *resource-name* values, see Appendix C, “Resource types,” on page 1171.

dbid
The DBID of the database that was being copied.

obid
The OBID of the table space or index space in the database.

page-rba-or-lrsn
The RBA value in a non-data-sharing environment, or the LRSN value in a data sharing environment, of the last page update.

log-rba-or-lrsn
The RBA value in a non-data-sharing environment, or the LRSN value in a data sharing environment, of the log record that was being processed when the logically broken page was discovered.

modname
The name of the log apply module that discovered an error in the page.

erqual
The trace identifier for the error in the page. `X'0000'` indicates that an abend occurred during online recovery or the RECOVER utility. The page is marked as broken, and recovery continues.

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

System action

The page is marked as logically broken, a 04E abend with reason code 00C90102 is issued, and a dump is taken. The page is unavailable to this and other agents until it is repaired.

Operator response

Notify the system programmer.

User response

Save the dump for analysis by IBM Support. Copy the table space or index space to another data set for later analysis by IBM Support. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Related information

00C90102 (Db2 Codes)

DSNI051I *csect-name* ASYNCHRONOUS GRECP OR LPL RECOVERY IN PROGRESS FOR *function-name* - ID = *function-id* TYPE *object-type* NAME *object-name*

Explanation

The second pass log apply has started for an object with group buffer pool recovery pending (GRECP) or logical page list (LPL) status.

csect-name
The name of the control section that issued the message.

function-name
The function that triggered the recovery: Expected values are:

- START DATABASE COMMAND
- AUTOMATIC GRECP RECOVERY
- AUTOMATIC LPL RECOVERY

function-id
A decimal number that represents the recovery function.

object-type
The type of object, which is an index space.

object-name
The name of the object.

System action

The object is started and the second pass log apply for GRECP or LPL recovery is initiated. During the LPL or GRECP recovery process, additional messages might be issued, including:

- DSNI005I, which indicates an error
- DSNI006I, which indicates the start of recovery
- DSNI021I, which indicates successful completion
- DSNI022I, which provides the status of recovery operations

User response

No action is required.

You can issue a DISPLAY DATABASE command with the RESTRICT option for the specified index space to determine whether the GRECP or LPL exception state has been cleared.

Related reference

-DISPLAY DATABASE (Db2) (Db2 Commands)

Related information

DSNI005I
csect-name LPL OR GRECP RECOVERY CANNOT BE DONE FOR *function-name* - ID = *function-id* OBJECT TYPE *object-type* OBJECT NAME *object-name* REASON *reason-code* TYPE *resource-type* NAME *resource-name*

DSNI006I
csect-name ASYNCHRONOUS GRECP OR LPL RECOVERY IN PROGRESS FOR *function-name* - ID *function-id* TYPE *object-type* NAME *object-name*

DSNI021I
csect-name GRECP OR LPL RECOVERY FOR *function-name* - ID = *function-id* TYPE *object-type* NAME *object-name* HAS COMPLETED SUCCESSFULLY.

DSNI022I
csect-name LPL OR GRECP RECOVERY LOG APPLY FOR *function-name* - ID = *function-id* AT LOGPOINT *current-position* TO LOGPOINT *end-position* AT LOGPOINT IN LOCAL TIMESTAMP = *at-logpoint-timestamp* TO LOGPOINT IN LOCAL TIMESTAMP = *to-logpoint-timestamp*

DSNI052I *csect-name* AN AGENT HAS EXCEEDED THE THRESHOLD FOR STORAGE USE IN WORK FILE DATABASE *database-name* FOR *object-type*. THRESHOLD=*percentage* PERCENT. TOTAL STORAGE CONFIGURED=*total-storage* KB. CONNECTION ID = *connection-id*. CORRELATION ID = *correlation-id*. LUWID=*luwid*. PACKAGE NAME=*package-name*. PLAN NAME=*plan-name*.

Explanation

The total amount of storage that an agent used in the work file database exceeded the threshold that is defined by subsystem parameter WFSTGUSE_AGENT_THRESHOLD.

csect-name
The name of the control section that issued the message.

database-name
The name of the work file database.

object-type
The type of object. Possible values are:

DECLARED GLOBAL TEMP TABLES
Specifies that the storage is being used for declared temporary tables.

WORK FILES
Specifies that the storage is being used for work files.

DECLARED GLOBAL TEMP TABLES AND WORK FILES
Specifies that the storage is being used for declared temporary tables and work files.

percentage
The maximum percentage of work file database storage that an agent can use before this message is issued. This value is the value of subsystem parameter WFSTGUSE_AGENT_THRESHOLD.

total-storage
The total amount of storage that is configured for the specified object type, in kilobytes.

connection-id
The connection identifier of the agent.

correlation-id
The correlation identifier of the agent.

luwid
The logical unit of work ID of the agent. An asterisk (*) denotes that the thread originated at the local site.

package-name
The package name that is associated with the agent.

plan-name
The plan name that is associated with the agent.

This message is issued once within each commit scope in the application.

System action

Processing continues.

System programmer response

Work with the application programmer to determine how the application program is using space in the work file database.

Determine whether the threshold that is specified by subsystem parameter WFSTGUSE_AGENT_THRESHOLD is too low.

If WFSTGUSE_AGENT_THRESHOLD is not too low, evaluate the type of work file activity that the agent is performing. Take one or both of the following actions:

- Create additional table spaces in the work file database of the object types that are specified in this message.

  Use the DSNTWFG exec in job step DSNTIST of installation job DSNTIJTM to create additional table spaces.
- Change the value of subsystem parameter WFDBSEP from NO to YES.

  Work file table spaces can be used for declared temporary tables or for work file work, such as sorting. When subsystem parameter WFDBSEP is set to NO, **Db2** selects work file table spaces that can grow into secondary extents for declared temporary tables, and chooses work file table spaces that cannot grow into secondary extents for work file work. If there is not enough space in one type of table space, Db2 switches to the other type. When Db2 uses work file table spaces that are designated for work file activity for declared temporary tables, space for work file activity might be quickly consumed. When Db2 uses work file table spaces that are designated for declared temporary tables for work file activity, space for declared temporary table tables might be rapidly consumed because of growth through secondary extents. To prevent Db2 from switching from one type of table space to the other, set WFDBSEP to YES. Doing so can cause high-consuming agents to experience resource unavailable conditions, but can help protect other agents on the system that are using work file resources.

Programmer response

Use the agent information in the message to determine which application exceeded space use threshold WFSTGUSE_AGENT_THRESHOLD. Examine the application to determine the ways in which the application is using space in the work file database.

Related tasks

Installation step 16: Create default storage group, define temporary work files, and bind Db2 REXX Language Support: DSNTIJTM (Db2 Installation and Migration)

Related reference

AGENT LEVEL THRESHOLD field (WFSTGUSE_AGENT_THRESHOLD subsystem parameter) (Db2 Installation and Migration)

SEPARATE WORK FILES field (WFDBSEP subsystem parameter) (Db2 Installation and Migration)

DSNI053I ***csect-name*** **THE DB2 SUBSYSTEM HAS EXCEEDED THE THRESHOLD FOR STORAGE USE IN WORK FILE DATABASE *database-name* FOR *object-type*. THRESHOLD=*percentage* PERCENT. TOTAL STORAGE CONFIGURED=*total-storage* KB.**

Explanation

This message warns of a possible storage shortage in the work file database. The amount of storage that is being used has exceeded the system-level warning threshold that is defined by subsystem parameter WFSTGUSE_SYSTEM_THRESHOLD.

csect-name
The name of the control section that issued the message.

database-name
The name of the work file database.

object-type
The type of object. Possible values are:

DECLARED GLOBAL TEMP TABLES
Specifies that the storage is being used for declared temporary tables.

WORK FILES
Specifies that the storage is being used for work files.

DECLARED GLOBAL TEMP TABLES AND WORK FILES
Specifies that the storage is being used for declared temporary tables and work files.

percentage
The maximum percentage of work file database storage that is used before this warning is issued. This value is the value of subsystem parameter WFSTGUSE_SYSTEM_THRESHOLD.

total-storage
The total amount of storage that is configured for the work file database, in kilobytes.

This message is issued at five-minute intervals, for as long as the criteria for issuing the message are met.

System action

Processing continues.

If the situation is not alleviated, applications that use the work file database might fail.

System programmer response

Determine whether the warning threshold that is specified by subsystem parameter WFSTGUSE_SYSTEM_THRESHOLD is too low.

If WFSTGUSE_AGENT_THRESHOLD is not too low, take one or both of the following actions:

- Create additional table spaces in the work file database of the object types that are specified in this message.

  Use the DSNTWFG exec in job step DSNTIST of installation job DSNTIJTM to create additional table spaces.
- Change the value of subsystem parameter WFDBSEP from NO to YES.

  Work file table spaces can be used for declared temporary tables or for work file work, such as sorting. When subsystem parameter WFDBSEP is set to NO, Db2 selects work file table spaces that can grow into secondary extents for declared temporary tables, and chooses work file table spaces that cannot grow into secondary extents for work file work. If there is not enough space in one type of table space, Db2 switches to the other type. When Db2 uses work file table spaces that are designated for work file activity for declared temporary tables, space for work file activity might be quickly consumed. When Db2 uses work file table spaces that are designated for declared temporary tables for work file activity, space for declared temporary table tables might be rapidly consumed because of growth through secondary extents. To prevent Db2 from switching from one type of table space to the other, set WFDBSEP to YES. Doing so can cause high-consuming agents to experience resource unavailable conditions, but can help protect other agents on the system that are using work file resources.

Related tasks

Installation step 16: Create default storage group, define temporary work files, and bind Db2 REXX Language Support: DSNTIJTM (Db2 Installation and Migration)

Related reference

SYSTEM LEVEL THRESHOLD field (WFSTGUSE_SYSTEM_THRESHOLD subsystem parameter) (Db2 Installation and Migration)

Chapter 8. DSNJ messages

Message identifiers that begin with DSNJ communicate information about the recovery log manager.

DSNJ001I ***csect-name*** **CURRENT COPY *n* ACTIVE LOG DATA SET IS DSNAME=..., STARTRBA=..., ENDRBA=...**

Explanation

This message is generated for one of two reasons:

1. When the log manager is initialized, it sends this informational message to identify the current active log data sets (copy-1 and, if dual logging is used, copy-2).
2. When the current active log data set is full, Db2 will switch to the next available active log data set. This message identifies the next available active log data set which will be used for logging.

The value specified by the STARTRBA=value keyword is the RBA of the first byte of log data in the named data set. The value specified by the ENDRBA=value keyword is the RBA of the last possible byte in the data set. These values may later be needed for a conditional restart.

System programmer response

None required. However, if recovery is required, information from this message may be required as input to the change log inventory (DSNJU003) utility.

DSNJ002I **FULL ACTIVE LOG DATA SET DSNAME=..., STARTRBA=..., ENDRBA=...**

Explanation

This message is sent at the time the log manager fills an active log data set and switches to a new empty data set. The message shows the name and log RBA range of the full data set.

System programmer response

None required. However, if recovery is required information from this message may be required as input to the change log inventory (DSNJU003) utility.

DSNJ003I ***csect-name*** **FULL ARCHIVE LOG VOLUME DSNAME=..., STARTRBA=..., ENDRBA=..., STARTxxxx=..., ENDxxxx=..., UNIT=..., COPYnVOL=..., VOLSPAN=..., CATLG=...**

Explanation

Offloading for the specified archive log data set was successfully completed for the given volume. If the data set spans multiple tape volumes, this message is generated for each tape volume. If the data set spans multiple DASD volumes, only one message will be generated displaying the first VOLSER, appended with a plus sign ('+') to indicate the data set spans multiple volumes. 'xxxx' is replaced by either TIME or LRSN.

System action

An archive log data set has been created, and the archive log data set inventory in the bootstrap data set (BSDS) has been updated with the information in the message:

DSNAME
The name of the archive log data set.

STARTRBA
The starting RBA contained in the volume.

ENDRBA
The ending RBA contained in the volume.

STARTLRSN
The starting LRSN contained in the volume for data sharing systems.

ENDLRSN
The ending LRSN contained in the volume for data sharing systems.

STARTTIME
The starting store-clock value of the log records in the volume for non-data sharing systems.

ENDTIME
The ending store-clock value of the log records in the volume for non-data sharing systems.

UNIT
The device unit to which the data set was allocated.

COPYnVOL
The name of the volume. This message keyword is displayed as COPY1VOL if this is the copy-1 archive log data set, and as COPY2VOL if this is the copy-2 archive log data set.

VOLSPAN
An indicator to denote one of four conditions:

- If '00', the data set is entirely contained on the volume specified by 'COPYnVOL'.
- If '01', this is the first entry of a multivolume data set.

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- If '11', this is the middle entry of a multivolume data set.
- If '10', this is the last entry of a multivolume data set.

CATLG
An indicator to denote one of two conditions:

- If 'NO', the archive log data set is uncataloged.
- If 'YES', the archive log data set is cataloged.

The BSDS is automatically updated with the information contained in this message; however, if recovery is required, information from this message may be required as input to the change log inventory utility (DSNJU003).

DSNJ004I ACTIVE LOG COPY n INACTIVE, LOG IN SINGLE MODE, ENDRBA=...

Explanation

This message is sent when the dual active logging option is selected and copy 'n' becomes inactive. A log copy becomes inactive when the next active log data set is not ready when required. ENDRBA is the last byte of log data written on copy 'n'. This is usually caused by a delay in off-load.

System action

The log is switched to single mode until the next data set for copy 'n' is ready for logging.

If Db2 is shut down or abends while in single mode with the ZPARM option still set for dual active data sets, the previous state of the active log data sets determines what happens when Db2 is started, as follows:

- If fewer than two data sets are available (not flagged as STOPPED) for each set of active logs, Db2 startup terminates and message DSNJ112E is issued.
- If an active log data set is in NOTREUSABLE state, Db2 can be started in single logging mode, but dual mode takes effect when the other active log data set becomes available after offloading.

This message is non-scrollable. It remains highlighted on the console until you take the appropriate action.

Operator response

Execute an MVS *Display System Requests* command (D R,L for example) to ensure that there are no outstanding requests that are related to the log off-load process. Take the necessary action to satisfy any requests, and permit off-load to continue.

System programmer response

If the switch to single mode was caused by the lack of a resource required for off-load, the necessary resource should be made available to allow off-load to complete and thus permit dual logging to proceed. If recovery is required, information from this message might be required as input to the change log inventory (DSNJU003) utility.

DSNJ005I ACTIVE LOG COPY n IS ACTIVE, LOG IN DUAL MODE, STARTRBA=...

Explanation

This message is sent when copy 'n' of the log becomes active after previously being flagged as inactive. STARTRBA is the RBA of the first byte of log data written on copy 'n' after it was activated.

System programmer response

None required. However, if recovery is required, information from this message may be required as input to the change log inventory (DSNJU003) utility.

DSNJ006I ALLOCATION FOR NEW ARCHIVE LOG DATA SET HAS BEEN CANCELLED BY OPERATOR.

Explanation

This message is sent if the operator answers 'N' to the WTOR message DSNJ008E.

System action

If the allocation is for copy 1 archive log data set, offload terminates processing until the next time it is activated. If copy 1 has already been allocated and this request is for copy 2, offload switches to single offload mode for this data set only.

DSNJ007I *csect-name* OPERATOR CANCELED MOUNT OF ARCHIVE VOL SER= *volser*

Explanation

If the operator answers 'N' to the WTOR message DSNJ009I, this message is issued. The variable 'volser' is the volume serial of an archive log volume required for the read request.

System action

The read request for the archive log volume fails. If the request was issued with the COND=YES parameter, return code 12 and reason code 00D1032B are

returned to the requester. Otherwise, Db2 abends with reason code 00D1032B.

DSNJ008E ***nn* OF *mm* ACTIVE LOGS ARE FULL. *ssname* NEEDS ARCHIVE SCRATCH. REPLY Y WHEN DEVICE READY OR N TO CANCEL.**

Explanation

The installation has requested a WTOR before archive log data set allocation. Db2 needs a scratch volume for offloading an active log data set.

ssname
The name of the Db2 subsystem.

nn
The number of full active log data sets.

mm
The total number of active log data sets.

System action

The offload task waits for the operator's reply.

Operator response

The operator has three options:

- Get a scratch volume ready, make sure there is an available unit for the volume, and reply 'Y'. Db2 then continues with the offload.
- Determine from the number of active log data sets available whether the offload can be delayed until the next time an active log data set becomes full. If the process can be delayed, then reply 'N'.

  This response has two possible effects.

  – If dual archive logging is in effect and this allocation is for a copy 1 archive data set, the 'N' response delays the offload process until the next active log data set becomes full.
  – However, if the copy 1 archive data set has already been allocated and this request is for copy 2, the 'N' response causes the offload to switch to single archive mode (the switch is for this data set only).
- Defer giving a response. This causes offload to wait before processing. However, because offload is a separate service task, the wait does not affect Db2 performance.

If offloading to DASD, an error has occurred attempting to allocate an archive log data set. Reply 'Y' to receive the error messages.

DSNJ009E **ssname NEEDS VOL SER=nnnnnn. REPLY Y TO CONTINUE OR N TO CANCEL**

Explanation

The installation requested WTOR before archive log data set allocation. Db2 needs the specified archive volume for a read operation. The subsystem name is 'ssname'.

System action

The archive log read service task waits for the operator's reply. This wait affects the agent for which the log read was issued and any other agents that might be waiting on the log read service task queue.

Operator response

Locate the requested volume, ensure that a device is available, and reply 'Y'. Db2 continues with dynamic allocation and then begins reading the log.

If dual archiving is in effect, a response of 'N' causes archive read to reissue the message for the copy 'Z' copy 2 archive VOLSER with the same RBA range. A response of 'N' to this second WTOR, or to the initial WTOR for single archiving, causes the archive read service task to fail with unpredictable results.

DSNJ010I ***csect-name* INVALID RESPONSE. WTOR WILL BE REPEATED.**

Explanation

A WTOR was issued during archive data set allocation. The user did not respond correctly to the message. Either 'Y' or 'N' must be entered.

System action

The original WTOR is repeated.

Operator response

Reply as indicated in the repeated message.

DSNJ011I **CONDITIONAL RESTART RECORD *record-identifier* CREATED AT *timestamp* WAS FOUND. REPLY Y TO USE, N TO CANCEL**

Explanation

When the log manager was initialized, a conditional restart control record was found in the bootstrap data set.

This message provides the following information to help identify the conditional restart record that will be used:

- A record identifier, which is a 4 byte hexadecimal number

- The creation timestamp, in the format *yy.ddd hh:mm*:

  yy
  Two-digit indicator for the year.

  ddd
  Three-digit indicator for the day of the year.

  hh:mm
  Indicator for the time of the day.

System action

The system action depends on the reply.

'Y'
Db2 is started conditionally, using the record that was found.

'N'
Db2 startup terminates.

Operator response

If a Db2 conditional restart is to be done and if the date and time displayed are correct, then reply 'Y' to the outstanding message. If you are not sure, or if you do not want to use the indicated record, contact the system programmer.

System programmer response

If a normal restart of Db2 has failed and you have created a conditional restart control record with the change log inventory (DSNJU003) utility, check whether the time and date in the message agree with when you created that record. If they do agree, reply 'Y' to the outstanding WTOR. If they do not, reply 'N' and investigate the discrepancy.

Related concepts
Recovering from BSDS or log failures during restart (Db2 Administration Guide)
Related reference
DSNJU003 (change log inventory) (Db2 Utilities)
DSNJU004 (print log map) (Db2 Utilities)

DSNJ012I ERROR ccc READING RBA rrr IN DATA SET ddd CONNECTION-ID=xxxxxxxx, CORRELATION-ID=yyyyyyyyyyyy

Explanation

While scanning log records read into a buffer, the log manager detected a logical error with reason code 'ccc'. 'rrr' is the log RBA of the segment in the buffer at which the error was detected. 'ddd' is the name of the active or archive log data set from which the record was read. If 'ddd' is blank, the data was read from an active log output buffer.

The connection and correlation IDs identify the user or application that encountered the problem. Messages that have the same connection ID and correlation ID relate to the same user. Correlation IDs beginning with '0nn' where 'nn' is a number from 01 to 28, identify system agents.

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data). for information about recovery from log failures.

System action

The application program that invoked the log manager is terminated with reason code 'ccc'. However, information in this message may be useful in diagnosing the abend that will follow.

DSNJ013I TERMINAL ERROR ccc IN BUFFER rrr BEFORE ACTIVE LOG WRITE

Explanation

A scan of the log output buffer just prior to writing the buffer detected an inconsistency in the log data. 'ccc' is the abend reason code associated with the SDUMP that is produced. 'rrr' is the log RBA at which the error was detected.

System action

Db2 will terminate with a dump, and will not write the damaged buffer to either COPY 1 or COPY 2 active log data set.

Operator response

Notify the system programmer. Start Db2 after it terminates.

System programmer response

Because the damaged buffer has not been written to a log data set, Db2 may be restarted. No corrective action is required.

Problem determination

In the Db2 formatted block section of the dump, locate the chain of LBCE blocks. Those are log buffer control elements, and each LBCE controls one 4KB log output buffer. LBCEBUFF, at offset X'20' in the LBCE, points to the buffer, which is always on a 4KB boundary. The log RBA of the first byte of the buffer is in a 6-byte field at offset X'FF2' in the buffer itself. The layout of the buffer is described by the DSNDLCID mapping macro. The header of each record within the buffer is described by the DSNDLRH mapping macro.

Locate the buffer that contains the log RBA from the message and find the damage by referring to the description of the reason code later in this book.

DSNJ014I TERMINAL ERROR ccc IN BUFFER rrr AFTER ACTIVE LOG WRITE.

Explanation

A scan of the log output buffer, after writing to the COPY 1 active log data set and before writing to COPY 2, detected an inconsistency in the log data. 'ccc' is the abend reason code associated with the SDUMP that is produced. 'rrr' is the log RBA at which the error was detected.

System action

Db2 will terminate with a dump, and will not write the damaged buffer to the COPY 2 data set.

Operator response

Notify the system programmer.

System programmer response

The block containing the indicated log RBA may be damaged. The buffer was found to be in error at the completion of the write to the COPY 1 data set of the active log.

If dual active logs are being used, use print log map (DSNJU004) to list the active log data sets for both copies of the active log. Find the COPY 2 data set with the corresponding RBA, and copy that data set (using access method services REPRO) to the COPY 1 data set. Start Db2.

If only a single active log is used, contact the IBM support center for assistance. An attempt to start Db2 may succeed if the damage to the buffer occurred after completion of the write to DASD.

Problem determination

In the Db2 formatted block section of the dump, locate the chain of LBCE blocks. Those are log buffer control elements, and each LBCE controls one 4KB log output buffer. LBCEBUFF, at offset X'20' in the LBCE points to the buffer, which is always on a 4KB boundary. The log RBA of the first byte of the buffer is in a 6-byte field at offset X'FF2' in the buffer itself. The layout of the buffer is described by the DSNDLCID mapping macro. The header of each record within the buffer is described by the DSNDLRH mapping macro. Locate the buffer that contains the log RBA from the message and find the damage by referring to the description of the reason code later in this book.

DSNJ015I CSRONLY PROHIBITS LOG ALTERATIONS. RECORD rrr CREATED .... REPLY Y TO USE, N TO CANCEL.

Explanation

During Db2 startup, the log manager found an inactive conditional restart control record in the bootstrap data set. Because this control record indicates CSRONLY, no log data sets will be modified. If log truncation was specified, it will be simulated. Only the first phase of restart (current status rebuild) will be performed. The hexadecimal identifier (rrr) and creation timestamp (yy.ddd hh:mm) identify the record found.

System action

A 'Y' reply will continue the conditional restart. A 'N' reply will terminate Db2 startup.

Operator response

To continue this CSRONLY processing, reply 'Y' to this message. If you are not sure, contact the system programmer.

System programmer response

The conditional restart control record will not be deactivated at the end of the CSRONLY processing. To deactivate this record, either cancel this record or create a new record. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data). for more information.

DSNJ016E *csect-name* WARNING - SYSTEM CHECKPOINT PROCESSOR MAY HAVE STALLED. LAST CHECKPOINT WAS TAKEN *date-time*.

Explanation

While switching active log data sets, Db2 found that there has not been a system checkpoint taken since the last time Db2 switched active log data sets. *date-time* is the date and time of the last system checkpoint. There should be at least one system checkpoint on each log data set.

System action

Db2 continues processing. If statistics class 3 is active, IFCID 0335 is written.

This message is non-scrollable. It remains highlighted on the console until you take the appropriate action.

This message is deleted when a system checkpoint is taken.

System programmer response

This message might be an indication that the system checkpoint processor may no longer be functioning. This situation can result in a very long restart if logging continues without a system checkpoint. You should monitor system checkpoint activity very closely. You can use the -DISPLAY LOG command or run the Print Log Map utility (DSNJU004) to display the most recent checkpoint. If Db2 continues logging beyond the defined checkpoint frequency, you should quiesce activity and terminate Db2 to minimize the restart time.

Prior to terminating Db2, obtain a dump of the Db2 address spaces for problem determination.

DSNJ017E ***csect-name*** **WARNING - OFFLOAD TASK HAS BEEN ACTIVE SINCE** ***date-time*** **AND MAY HAVE STALLED.**

Explanation

While switching active log data sets, Db2 found that the offload task has been active since the last time Db2 switched active log data sets. The offload task began archiving an active log data set at *date-time*. If active log switching is occurring rather frequently, repetitive DSNJ017E warnings might be suppressed.

System action

Db2 continues processing. If statistics class 3 is active, IFCID 0335 is written. This message will be deleted when the offload task completes the archive process.

This message is non-scrollable. It remains highlighted on the console until you take the appropriate action.

System programmer response

This may be an indication that there may be an outstanding tape mount request or that the offload task may no longer be functioning. This situation can result in a log-full situation if Db2 can not archive log data sets when they fill. You should reply to any tape mount requests and monitor offload activity very closely. You can issue the -DISPLAY LOG command to display the status of the offload task, and the -ARCHIVE LOG CANCEL OFFLOAD command can be used to terminate and restart the offload process.

Prior to terminating the offload task, obtain a dump of the Db2 MSTR address space for problem determination.

DSNJ020I ***csect-name*** **RECEIVED REPLY OF N TO** ***msg-num*****. SUBSYSTEM STARTUP IS TERMINATED.**

Explanation

The operator chose to terminate Db2 startup by answering 'N' to 'msg-num'.

System action

Db2 will not restart.

Operator response

To restart Db2, follow the 'operator response' of 'msg-num'.

DSNJ030I **RBA RANGE** ***start-rba*** **TO** ***end-rba*** **NOT AVAILABLE IN ACTIVE LOG DATA SETS**

Explanation

Previous errors have made the active log data sets that contain the relative byte address (RBA) range reported in the message unavailable to Db2. The status of these logs is STOPPED in the bootstrap data set (BSDS).

System action

Db2 terminates with a dump.

Operator response

Notify the system programmer.

System programmer response

The log RBA range must be available for Db2 to be recoverable. Correct previous errors and restore the active log data set(s) that contain the RBA range reported in the message.

- If the log data sets are recoverable, the active log data set inventory in the BSDS must be modified to reset the STOPPED status.
  1. Use the print log map (DSNJU004) utility to obtain a copy of the BSDS log inventory.
  2. Use the change log inventory (DSNJU003) utility to delete the active log data sets that are marked STOPPED, by using DELETE statements.
  3. Add the data sets again by using NEWLOG statements of the DSNJU003 utility. The starting and ending RBA for each active log data set must be specified on the NEWLOG statements.
- If the log data sets are not recoverable, conditionally restart Db2.

Problem determination

Examine previous messages to determine the reason the active log data sets are unavailable to Db2.

Related concepts

Recovering from BSDS or log failures during restart (Db2 Administration Guide)

Conditional restart (Db2 Administration Guide)

Related tasks

What to do before RBA or LRSN limits are reached (Db2 Administration Guide)

Related reference

DSNJU003 (change log inventory) (Db2 Utilities)

DSNJU004 (print log map) (Db2 Utilities)

Related information

Recovering from active log failures (Db2 Administration Guide)

Recovering from archive log failures (Db2 Administration Guide)

DSNJ031I ***csect-name*** **WARNING - UNCOMMITTED UR HAS WRITTEN** ***number*** **LOG RECORDS - CORRELATION NAME =** ***correlation-name*** **CONNECTION ID =** ***connection-id*** **LUWID =** ***logical-unit-of-work-id=token*** **PLAN NAME =** ***plan-name*** **AUTHID =** ***authorization-id*** **END USER ID =** ***user-id*** **TRANSACTION NAME =** ***transaction-name*** **WORKSTATION NAME =** ***workstation-name***

Explanation

A unit of recovery (UR) has reached the threshold number of log records that were written without a commit or rollback operation. This threshold was defined during installation in subsystem parameter URLGWTH.

csect-name
The name of the control section that issued the message.

number
The cumulative number of log records that were written since the beginning of the UR.

correlation name
The correlation name that is associated with the UR.

connection-id
The connection ID that is associated with the UR.

logical-unit-of-work-id
The logical unit of work ID. An asterisk (*) denotes that the thread originated at the local site. This value consists of a fully qualified LU network name followed by a period and an LUW instance number. The LU network name consists of a one- to eight-character network ID, a period, and a one- to eight-character network LU name. The LUW instance number consists of 12 hexadecimal characters that uniquely identify the unit of work.

token
A unique token number that is associated with the logical unit of work ID.

plan-name
The plan that is associated with the UR.

authorization-id
The authorization ID that is associated with the UR.

user-id
The user ID that is associated with the UR, if known. Otherwise, an asterisk (*).

transaction-name
The transaction that is associated with the UR, if known. Otherwise, an asterisk (*).

workstation-name
The workstation host name that is associated with the UR, if known. Otherwise, an asterisk (*).

System action

Processing continues. If statistics class 3 is active, IFCID 0313 is written.

This message is repeated each time the threshold is reached.

System programmer response

Consult with the application programmer to determine if this UR is problematic.

If an application program caused the UR to reach its threshold number of log records, you can use CANCEL THREAD (*token*) to cancel the UR. If you cancel an uncommitted UR, Db2 rolls back the changes. The amount of time that is required for this process depends on the amount of work that was done by the UR.

Programmer response

Ensure that the application commits frequently enough, or consult with your Db2 administrator about increasing the threshold number of log records. Use the URLGWTH subsystem parameter.

Related tasks

Displaying threads by LUWID (Db2 Administration Guide)

Programming for concurrency (Db2 Performance)

Related reference

UR LOG WRITE CHECK field (URLGWTH subsystem parameter) (Db2 Installation and Migration)

DSNJ032I ***csect-name alert-level*- APPROACHING END OF THE LOG RBA RANGE OF *maximum-value*. CURRENT LOG RBA IS *current-level***

Explanation

The current log RBA is approaching the end of the log RBA range. The current log RBA should not be allowed to advance to the *maximum-value*.

csect-name
The name of the control section that issued the message.

alert-level
The type of alert, based on the current log RBA level:

WARNING
The current log RBA reached x'F00000000000' for the 6-byte RBA format or x'FFFFFFFF000000000000' for the 10-byte RBA format.

CRITICAL
The current log RBA value reached x'FFFF00000000' for the 6-byte RBA format or x'FFFFFFFFFF0000000000' for the 10-byte RBA format.

maximum-value
The value is x'FFFFFFFFFFFF' if the log is being written in the 6-byte RBA format. The value is x'FFFFFFFFFFFFFFFFFFFF' if the log is being written in the 10-byte RBA format.

current-level
The current log RBA value.

System action

Db2 continues processing if the *alert-level* value is WARNING or if Db2 is restarting. Otherwise, Db2 terminates with reason code 00D10251.

Any attempt to restart Db2 in general access mode, following the termination will cause Db2 to restart in light mode, and Db2 will shut down after restart completes the recovery of the incomplete units-of-recovery.

This message is non-scrollable. It remains highlighted on the console until you take the appropriate action.

Operator response

Notify the system programmer.

If Db2 terminates and restarts in light mode, wait until it completes the recovery of incomplete units-of-recovery, and then restart it in ACCESS(MAINT) mode to recover any indoubt units of recovery, start any table spaces in a restricted state such as LPL or GRECP, or terminate any utilities that are in progress.

System programmer response

If the Db2 log is using the 6-byte RBA format, convert the BSDS data sets to support the 10-byte RBA format. Convert all catalog and directory page sets to the extended format as soon as possible.

If the log is using the 10-byte RBA format, use the following information to determine when to reset the log, and how to reset it.

Information on resetting the log RBA:

What to do before RBA or LRSN limits are reached (Db2 Administration Guide)
Resetting the log RBA value in a non-data sharing environment (6-byte format) (Db2 Administration Guide)
Resetting the log RBA value in a data sharing environment (6-byte format) (Db2 Administration Guide)

Related concepts

Restart light (Db2 Data Sharing Planning and Administration)

Related tasks

Starting a table space or index space that has restrictions (Db2 Administration Guide)

Related reference

-TERM UTILITY (Db2) (Db2 Commands)
-START DATABASE (Db2) (Db2 Commands)
DSNJCNVT (Db2 Utilities)

Related information

00D10251 (Db2 Codes)

DSNJ033E ***csect-name* THE LOG RBA MUST BE RESET BEFORE THE END OF THE LOG RBA RANGE IS REACHED**

Explanation

This message is issued with the DSNJ032I message to indicate that Db2 is approaching the end of the log RBA range.

csect-name
The name of the control section that issued the message.

System action

The *alert-level* value in the accompanying message DSNJ032I determines the system action.

User response:
See the description of message DSNJ032I for information and recommended actions.

Related information

DSNJ032I
csect-name alert-level- APPROACHING END OF THE LOG RBA RANGE OF *maximum-value*. CURRENT LOG RBA IS *current-level*

DSNJ034I ***csect-name alert-level*- APPROACHING END OF THE LRSN RANGE. CURRENT LRSN IS *current-lrsn***

Explanation

The LRSN for the data-sharing group is approaching the maximum value. If the Db2 log is using the 6-byte RBA format, the maximum LRSN is x'FFFFFFFFFFFF'. If the Db2 log is using the 10-byte RBA format, the maximum LRSN is x'FFFFFFFFFFFFFFFFFFFF'.

csect-name
The name of the control section that issued the message.

alert-level
The type of alert, based on the current LRSN value:

WARNING
The LRSN range will reach its limit in one year or less.

CRITICAL
The LRSN range will reach its limit in one week or less.

current-lrsn
The current LRSN value.

System action

Db2 continues processing if the *alert-level* value is WARNING or if Db2 is restarting. Otherwise, Db2 terminates with reason code 00D10251.

Any attempt to restart Db2 in general access mode, following the termination, causes Db2 to restart in light mode and to shut down after restart completes the recovery of the incomplete units-of-recovery.

This message is non-scrollable. It remains highlighted on the console until you take the appropriate action.

Operator response

Notify the system programmer.

If Db2 terminates and restarts in light mode, wait until it completes the recovery of incomplete units-of-recovery, and then restart it in ACCESS(MAINT) mode to recover any indoubt units-of-recovery, start any table spaces in a restricted state such as LPL or GRECP, or terminate any utilities that are in progress.

System programmer response

If the Db2 subsystem is using the 6-byte RBA log format, convert to the 10-byte RBA log format. This format allows the use of 10-byte LRSN values as well. If the database objects are in 6-byte basic format, they need to be converted to 10-byte extended format. If the Db2 subsystem is using the 10-byte RBA log format, contact IBM Support.

Related concepts

Restart light (Db2 Data Sharing Planning and Administration)

Related tasks

Starting a table space or index space that has restrictions (Db2 Administration Guide)

Related reference

-TERM UTILITY (Db2) (Db2 Commands)
-START DATABASE (Db2) (Db2 Commands)

Related information

00D10251 (Db2 Codes)

DSNJ035E ***csect-name* ACTION MUST BE TAKEN BEFORE THE END OF THE LRSN RANGE IS REACHED**

Explanation

This message is issued with the DSNJ034I message to indicate that Db2 is approaching the end of the LRSN range.

csect-name
The name of the control section that issued the message.

System action

The *alert-level* value in the accompanying message DSNJ034I determines the system action.

User response:
See the description of message DSNJ034I for information and recommended actions.

Related information

DSNJ034I

csect-name alert-level- APPROACHING END OF THE LRSN RANGE. CURRENT LRSN IS *current-lrsn*

DSNJ050I **LOAD MODULE DSNJL003 DOES NOT HAVE RMODE(24) ATTRIBUTE**

Explanation

The named load module was not link edited with the required RMODE(24) attribute.

System action

Db2 startup is terminated.

Operator response

Notify the system programmer of the failure.

System programmer response

Verify that all installation and maintenance activities against this module were executed using SMP. Verify that the JCLIN for SMP includes the correct RMODE control statement, and that the Linkage Editor provided with the Data Facility Product (DFP) for the version of MVS being used was invoked by SMP for the link edits. Correct the procedure or JCL which caused the error and rerun the necessary SMP jobs.

Problem determination

The MVS service aid AMBLIST provides Linkage Editor module attributes in the summary section of the LISTLOAD function output.

DSNJ070I ***csect-name*** **ARCHIVE LOG DSN PREFIX NOT IN PROPER FORMAT TO RECEIVE TIMESTAMP DATA. TIMESTAMPING OF *dsnname* BYPASSED**

Explanation

By way of a ZPARM parameter, the user has specified that the date and time of creation of an archive log data set be included as part of the archive log data set name (DSN). To accomplish this, the Db2 subsystem requires that the length of the archive log data set name prefix not exceed 19 characters if using the standard DATE format (YYDDD), or 17 characters if using the extended DATE format (YYYYDDD). If the prefix requirement is not met, this message is issued just prior to the allocation of the archive log data set specified in the message.

System action

The archive log data set will be allocated using the archive log prefix. However, the archive log DSN will not contain the date and time as the user requested.

Operator response

Notify the system programmer.

System programmer response

The values of TSTAMP and ARCPFXn subsystem parameters are not consistent with one another and must be changed.

Related reference

TIMESTAMP ARCHIVES field (TSTAMP subsystem parameter) (Db2 Installation and Migration)

COPY 1 PREFIX field (ARCPFX1 subsystem parameter) (Db2 Installation and Migration)

COPY 2 PREFIX field (ARCPFX2 subsystem parameter) (Db2 Installation and Migration)

DSNJ071I ***csect-name*** **TIMER FAILURE CAUSED TIMESTAMPING OF ARCHIVE *dsname* TO BE BYPASSED**

Explanation

By way of a ZPARM parameter, the user has specified that the date and time of creation of an archive log data set be included as part of the archive log data set name (DSN). However an attempt to get the current date and time from the system failed. This message is issued just prior to the allocation of the archive log data set specified in the message.

System action

The archive log data set will be allocated using the archive log prefix. However, the archive log DSN will not contain the date and time as the user requested.

DSNJ072E **ARCHIVE LOG DATA SET *dsname* HAS BEEN ALLOCATED TO NON-TAPE DEVICE AND CATALOGED. ZPARM CATALOG OPTION OF 'NO' HAS BEEN OVERRIDDEN.**

Explanation

The following archive log subsystem parameters specified that all archive log data sets are to be allocated to a non-tape device and uncataloged:

- The UNIT subsystem parameter specified a non-tape device.

- The CATALOG subsystem parameter value was specified as NO.

However, Db2 requires that all archive log data sets that are allocated to non-tape devices must be cataloged.

dsname
The archive log data set.

System action

The specified archive log data set was allocated to a non-tape device, as specified by the UNIT subsystem parameter, and was cataloged. The specified CATALOG subsystem parameter value of NO was overridden. The BSDS reflects that the data set was cataloged.

Operator response

Notify the system programmer.

System programmer response

Change the values of the UNIT and CATALOG subsystem parameters so that they are consistent with one another

Related reference
DEVICE TYPE 1 field (UNIT subsystem parameter) (Db2 Installation and Migration)
CATALOG DATA field (CATALOG subsystem parameter) (Db2 Installation and Migration)

DSNJ073I LOG ARCHIVE UNIT ALLOCATION FAILURE DETECTED, RETURN CODE=nnnn. ALLOCATION OR OFFLOAD OF ARCHIVE LOG DATA SET MAY FAIL.

Explanation

While building the SVC99 text entries to dynamically allocate a new archive log data set, a unit allocation failure was detected. This message is only generated when a trace for IFCID 320 is active. The reason code, indicated by 'nnnn' in the message, further clarifies the problem as follows:

4 (X'04')
The device type (unit name) on which the archive log data set is to be allocated is specified by the user in the Db2 system parameters. No UCBs could be found for the device type (unit name).

8 (X'08')
The device type (unit name) on which the archive log data set is to be allocated is specified by the user in the Db2 system parameters. This device type (unit name) could not be found in the MVS eligible device table (EDT).

32 (X'20')
Db2 was able to obtain a list of devices corresponding to the device type (unit name) specified in ZPARMs. However, it was determined by Db2 that this list contained a mixture of tape and nontape devices.

40 (X'28')
The device type (unit name) specified by the user in ZPARMs is valid. However, no devices are currently associated with the given device type (unit name).

44 (X'2C')
The device type (unit name) specified by the user in ZPARMs is valid. However, no DASD volumes are available with a volume use attribute of 'storage'.

48 (X'30')
The CVT indicates that UCB services are not available.

System action

This message is issued by Db2 after the SVC99 text entries are built, but prior to the allocation of the new archive log data set. As a result of the error, the dynamic allocation of the archive log data set will be attempted using standard default values. The standard default values are generally acceptable; however, the allocation may fail or the subsequent offload may produce undesirable processing results. For example:

- A return code of 4 or 44 (X'2C') will foretell an allocation error (DSNJ103I) when the SVC99 is issued for the archive data set.
- Offload processing to tape may fail. Db2 uses a volume count of 20 when allocating to tape, and uses the standard MVS volume count default of 5 volumes when writing to nontape devices. In the case of most of the above errors, it would be impossible for the Db2 subsystem to determine the device type on which the data set is to be allocated. Therefore, the standard MVS default is assumed for the volume count. If the data set is successfully allocated to a tape device, and the volume of data is such that more than five volumes will be used for the archive data set, the offload processing will receive an MVS ABEND 837-08 with message IEC028I when attempting to write to the sixth tape volume.
- Offload processing to a direct access device may fail. When allocating a new archive log data set on a direct access device, the Db2 subsystem will use a unit count to facilitate multivolume archive data sets. With most of the above errors, it may be impossible for the Db2 subsystem to correctly determine the type of device on which the data set is

to be allocated. Therefore, the standard default (1) is assumed for the unit count. If the data set is successfully allocated to a direct access device, and during the offload processing it becomes necessary to extend the data set to another device, the offload processing will receive an MVS B37 (out of space) ABEND, and the archive log data set will be deallocated.

Operator response

Notify the system programmer.

System programmer response

The required action is based on the return code indicated in the message.

4 (X'04') or 8 (X'08')
The most likely cause is an incorrect specification in the archive log ZPARMs (DSNTIPA panel). Correct the DEVICE TYPE field. If the DEVICE TYPE field from the archive log ZPARMs appears to be correct, check the EDT to ensure that the esoteric or generic unit name specified in the ZPARMs is actually in the EDT. Subsequent offload processing will archive the log data which could not be previously archived due to the allocation failure (DSNJ103I).

32 (X'20') or 40 (X'28')
To correct this situation, change the archive log DEVICE TYPE ZPARM to use a device type (unit name) which contains homogenous devices, or modify the device list associated with the device type (unit name) via a system generation to supply a list of homogenous devices.

44 (X'2C')
To correct this situation, issue an MVS mount command to change the volume use attribute of a mounted 'private' volume to 'storage'. If this is a recurring problem, a system generation may be required to add permanently resident volumes with a volume use attribute of 'storage' to the esoteric or generic unit, or ZPARMs may have to be changed to use a different esoteric or generic unit name for the DEVICE TYPE (on the DSNTIPA installation panel).

48 (X'30')
UCB services became available in MVS/ESA Version 4.1 (HBB4410).

DSNJ096E ***csect-name*** **CRCR ENDLRSN RBA VALUE OF *rrr* IS INVALID, NO TRUNCATION WILL OCCUR**

Explanation

Truncation cannot take place because the RBA value specified on the active CRCR record is not equal to the RBA of a log record. *rrr* is the ENDLRSN specified in the active record. The ENDLRSN RBA value must match the start of a log record in a non-data sharing environment.

System action

Db2 startup is terminated.

Operator response

Notify the system programmer.

System programmer response

Confirm that the ENDLRSN value specified in the Conditional Restart control record is correct. Run the Change Log Inventory (DSNJU003) utility with the CRESTART CANCEL parameters to cancel the conditional restart. If log truncation is needed, run the DSNJU003 utility with the correct ENDLRSN value. Restart Db2.

DSNJ098E ***csect-name*** **CRCR ENDLRSN OF *rrr* IS *xxx* THAN ANY KNOWN *yyyy*, NO TRUNCATION WILL OCCUR**

Explanation

Truncation cannot take place because the CRCR ENDLRSN is not in the range of LRSN or RBA values known to either the active or archive logs. *rrr* is the end LRSN specified in the active record. *xxx* is replaced by either HIGHER or LOWER. In a data sharing environment, if *xxx* is HIGHER, the CRCR ENDLRSN is higher than the LRSN of the last record written to the log data sets. If *xxx* is LOWER, the CRCR ENDLRSN is lower than the starting LRSN of the oldest archive data set. *yyyy* is replaced by LRSN. In a non-data sharing environment, if *xxx* is HIGHER, the CRCR ENDLRSN is higher than the RBA of the last record written to the log data sets. If *xxx* is LOWER, the CRCR ENDLRSN value is an RBA value that is lower than the starting LRSN of the oldest archive data set. *yyyy* is replaced by RBA.

System action

Db2 startup is terminated.

Operator response

Notify the system programmer.

System programmer response

Confirm that the ENDLRSN value specified in the Conditional Restart control record is correct. If it is not correct, run the Change Log Inventory (DSNJU003) utility with the CRESTART CANCEL parameters to cancel the conditional restart. If log truncation is needed, run the DSNJU003 utility with the correct ENDLRSN. Restart Db2.

DSNJ099I LOG RECORDING TO COMMENCE WITH STARTRBA=...

Explanation

This message is generated when the log manager is initialized during Db2 startup. The value specified by the STARTRBA=value keyword is the RBA of the next byte of log data to be recorded in the Db2 active log data set(s). This information may later be needed for a conditional restart.

This message is preceded by one DSNJ001I message (if single logging) or two DSNJ001I messages (if dual logging).

System programmer response

None required. However, if recovery is required, information from this message may be required as input to the change log inventory (DSNJU003) utility.

DSNJ100I *csect-name* ERROR OPENING BSDSn DSNAME=..., ERROR STATUS=*eeii*

Explanation

Log manager initialization or the -RECOVER BSDS command could not open the specified bootstrap data set (BSDS). BSDSn matches the ddname in the log startup JCL of the data set that cannot be opened. The value of *n* is 1 or 2. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data). for information about recovery from BSDS or log failures.

System action

When this error occurs at initialization time, Db2 startup must be terminated, because the log data sets cannot be determined and allocated without the BSDS. When this error occurs during -RECOVER BSDS processing, the command is terminated, and the system continues in single BSDS mode.

Operator response

Notify the system programmer.

System programmer response

Recover the BSDS that cannot be opened. Normally, if dual BSDSs are being used, recovery consists of making a copy of the remaining good BSDS.

Problem determination

The 'error status' contains the VSAM open return code in 'ee', and the VSAM open reason code in 'ii'. Refer to *z/OS DFSMS: Macro Instructions for Data Sets* for a list of the VSAM open return codes and reason codes, and the steps required to take corrective action.

DSNJ101E *csect-name* CRCRERBA OF *rrr* IS *xxx* THAN ANY KNOWN RBA, BUT COLD START WAS NOT SPECIFIED

Explanation

Truncation cannot take place because the CRCR end RBA is not in the range of RBA values known to either the active or archive logs. 'rrr' is the end RBA specified in the active record. 'xxx' is replaced by either HIGHER or LOWER. If HIGHER is the case, the CRCRERBA is higher than the end RBA of the most recent active log data set. LOWER means the CRCRERBA is lower than the starting RBA of the oldest archive data set.

System action

Db2 startup is terminated.

Operator response

Notify the system programmer.

System programmer response

Most likely, the archive log data set that contained the requested RBA has been deleted from the bootstrap data set (BSDS) by the change log inventory (DSNJU003) utility. Locate the output from an old Print Map run, and identify the data set that contains the missing RBA. If the data set has not been reused, run the DSNJU003 utility to add this data set back into the inventory of log data sets. Restart Db2.

DSNJ102I LOG RBA CONTENT OF LOG DATA SET DSNAME=..., STARTRBA=..., ENDRBA=..., DOES NOT AGREE WITH BSDS INFORMATION

Explanation

The log RBA range shown in the BSDS for the specified data set does not agree with the content of the data set. This message indicates that the change log inventory (DSNJU003) utility was used incorrectly or that a down-level volume is being used.

System action

Db2 startup processing is terminated.

Operator response

Notify the system programmer.

System programmer response

Use the print log map (DSNJU004) and change log inventory (DSNJU003) utilities to make the BSDS consistent with the log data sets.

DSNJ103I ***csect-name*** **LOG ALLOCATION ERROR DSNAME=*dataset-name*, ERROR STATUS=*status-indicator*, SMS REASON CODE=*ssssssss***

Explanation

The log manager encountered an error while it attempted to allocate the specified active or archive log data set.

csect-name
The name of the control section that issued the message.

dataset-name
The name of the data set.

status-indicator
The error reason code that is returned by MVS dynamic allocation (SVC99). This value consists of a 2-byte error code (S99ERROR) followed by a 2-byte information code (S99INFO) from the SVC99 request block.

ssssssss
If available, more SMS reason code information from S99ERSN, which is a field of S99RBX. *ssssssss* is displayed if the S99ERROR code indicates an SMS allocation error (97*xx*).

This message might be preceded by message DSNJ073I.

System action

For active log data sets, if the error is encountered during log manager initialization, Db2 startup is terminated. If two copies of the active log data sets are defined, this message is displayed only once.

For archive log data sets, if two copies of the archive log data sets are defined, processing continues on the remaining archive log data set.

Operator response

Notify the system programmer.

System programmer response

If the *status-indicator* value is '17080000', the site might have one or more active log data sets defined in the BSDS, but not allocated on DASD. To correct the situation, print the contents of the current active log data set inventory by using the print log map (DSNJU004) utility. Then, take one of the following actions:

- For each active log data set that is listed in the BSDS, but not allocated on DASD, allocate the active log data set by using access method services. The access method services command syntax for active log data sets can be found in installation job DSNTIJIN.
- Use the DSNJU003 utility DELETE statement to delete the errant active log data set name. Then, use the DSNJU003 utility NEWLOG statement to add the correct name to the active log data set inventory. The name that is specified on the NEWLOG statement must be the same as the name of the actual Db2 active log data set that is allocated on DASD.

If the problem occurred because the MVS task I/O table (TIOT) did not have enough space, an allocation error occurs. In this case, perform the following actions to maximize the size of the TIOT and to minimize the amount of TIOT space that each data set uses:

1. Set the MVS TIOT size to 64K in the ALLOCxx PARMLIB member.
2. Specify NON_VSAM_XTIOT=YES in the DEVSUPxx PARMLIB member to enable Db2 to use the MVS extended task I/O table (XTIOT) when allocating offload data sets.
3. Specify a dynamic volume count (DVC) of 0 for any SMS data set class that is used to allocate a Db2 BSDS, active log, or secondary log data set.
4. Reallocate any existing BSDS, active log, or secondary log data sets that were allocated with a DVC greater than 0.

If the problem occurred during Db2 initialization and that data set is an active log data set, take one of the following actions:

- Resolve the error (*status-indicator*) that is associated with the active log data set
- Provide another copy of the active log data set by using access method services (AMS)
- Update the BSDS by using the change log inventory (DSNJU003) utility
- Restart Db2

For archive log data sets, take one of the following actions:

- If the problem occurred during allocation with the intent to write the data set, no immediate action is required. However, failure to resolve the error (*status-indicator*) might eventually cause the available space in the active log to be exhausted (DSNJ111E), because all future offloads might fail due to the same error.
- If the problem occurred during allocation with the intent to read the data set, determine the problem. Use the DSNJU003 utility DELETE statement to delete the archive log data set from the BSDS archive log inventory. Then, use the DSNJU003 utility NEWLOG statement to add the data set back to the archive log inventory with the correct volume and device.

Related concepts

Recovering from BSDS or log failures during restart (Db2 Administration Guide)

Related reference

Interpreting DYNALLOC return codes (MVS Programming Authorized Assembler Services Reference)

S99RBX fields (MVS Programming Authorized Assembler Services Reference)

DSNJU003 (change log inventory) (Db2 Utilities)

Related information

Recovering from active log failures (Db2 Administration Guide)

Recovering from archive log failures (Db2 Administration Guide)

DSNJ073I
LOG ARCHIVE UNIT ALLOCATION FAILURE DETECTED, RETURN CODE=nnnn. ALLOCATION OR OFFLOAD OF ARCHIVE LOG DATA SET MAY FAIL.

DSNJ111E
OUT OF SPACE IN ACTIVE LOG DATA SETS

DSNJ104I *csect-name* RECEIVED ERROR STATUS *nnn* FROM *macro-name* FOR DSNAME *dsname*

Explanation

Db2 encountered an error while issuing macro *macro-name*. Unless *macro-name* is OPEN, and the target data set is a non-VSAM data set, the error status is the return code from the specified macro call.

More information about each error status *nnn* value follows:

- If *macro-name* is OPEN and the target data set is a VSAM data set, *nnn* is the return code in the error field of the access method services control block. Refer to the appropriate VSAM publication for a definition of these values. Message DSNJ104I is preceded by an IEC161I message that defines the error that occurred.
- If *macro-name* is OPEN and the target data set is a non-VSAM data set, *nnn* is zero. Message DSNJ104I is preceded by an IEC143I message that defines the error that occurred.
- If *macro-name* begins with MMSRV, *nnn* is the error information that is returned by media manager services. If an MMSRV CATUPDT failure occurs during truncation an active log data set, the log data set is unavailable to Db2, and the status of the log data set is flagged as STOPPED in the BSDS. Message DSNJ104I is preceded by an IEC161I message for a VSAM OPEN error, and by an IEC251I message for a VSAM CLOSE error.
- If *macro-name* is PROTECT and the target data set is an archive log data set, *nnn* is from DADSM PROTECT. Refer to the appropriate z/OS publication for a description of the MMSRV return codes.
- If *macro-name* is CLOSE, and the target data set is an archive log data set, *nnn* is the TCB completion code for an abend received during CLOSE processing. This abend is normally preceded by an IEC210I or IEC212I message that defines the error.
- If *macro-name* is EDTINFO or UCBLOOK, the first two bytes of *nnn* contain the return code and the second two bytes of *nnn* contain the reason code that are returned from the call.

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

System action

If this condition is encountered during log manager initialization, Db2 startup is terminated. If the error occurs later, and the data set is needed for offload or for input operations, Db2 processing continues. If a second copy of the data is available, Db2 attempts to allocate and open the second data set.

If the data set is needed as an active log data set, the log manager attempts to retry the failing request. If the retry fails, the Db2 subsystem is terminated.

Operator response

Notify the system programmer.

System programmer response

If the error occurred during initialization, correct the problem so that the data set is available, or provide another copy of the data set, and change the BSDS data sets to point to the new data set.

If the error occurred during Db2 processing, review the return code. Take the appropriate action to correct the problem so that the data set can be used at a later time, or use the change log inventory utility (DSNJU003) to remove the data set entry from the BSDS.

If the error was received from PROTECT, there might be a problem with the PASSWORD data set. Refer to the appropriate DADSM publication to determine the cause of the problem. When the problem has been corrected, add the archive log data sets that received the error to the PASSWORD data set. If you do not add these archive log data sets to the PASSWORD data set, archive read fails during OPEN of the data sets.

If the error was received from EDTINFO or UCBLOOK, and the allocation of the archive log data set fails, verify that the archive UNIT names are correct in the UNIT and UNIT2 subsystem parameters.

DSNJ105I ***csect-name*** **LOG WRITE ERROR DSNAME=*dataset-name* LOGRBA=*rba-value*, ERROR STATUS=*ccccffss***

Explanation

The log manager encountered a write error in the specified active log data set.

csect-name
The name of the control section that issued the message.

If *csect-name* is DSNJW107 or DSNJW127, the error occurred when writing the log buffers to an active log data set.

If *csect-name* is DSNWJ207, the error occurred while preformatting the next control area before writing log data to it.

dataset-name
The name of the data set.

rba-value
The RBA value in the log where the write error occurred.

ccccffss
The error information that is returned by media manager.

cccc
A 2-byte return code that describes the error.

ff
A 1-byte code that defines the functional routine that detected the error.

ss
The 1-byte status code that defines a general category of error.

System action

If the dual active logging option is selected, the log manager switches to the next data set for this copy. If the next data set is not ready, the log manager temporarily enters single logging mode and allocates a replacement data set for the one that encountered the error. Dual logging is resumed as soon as possible.

If single active logging option is selected and the next data set is not ready, the log manager waits for that data set to be available. In this case, log writing is inhibited until the replacement is ready for output.

Operator response

Notify the system programmer.

System programmer response

See the information for the media manager return code that is indicated in *ccccffss*.

Related reference
Media Manager return codes

DSNJ106I **LOG READ ERROR DSNAME=*dsname-value*, LOGRBA=*log-rba-value*, ERROR STATUS=*ccccffss***

Explanation

The log manager encountered an error while reading an active log data set. The ERROR STATUS value contains the error information returned by the media manager in the form *ccccffss*, where *cccc*is a 2-byte return code that describes the error, *ff* is a 1-byte code that defines the functional routine that detected the error, and *ss* is the 1-byte status code that defines a general category of error.

System action

If another log data set contains the data, the log manager attempts to read the data from the alternate source. If an alternate source is not available, the log manager returns a read error return code to the program requesting the log data.

Operator response

Notify the system programmer.

System programmer response

If the site is using dual logging, the requested RBA was probably retrieved from the corresponding dual active log data set, and no immediate response is necessary. However, if this error occurs frequently, or if the site is

using single logging, immediate attention may be required.

Take corrective action based on the media manager return codes.

It might be necessary to replace the bad data set with a new data set containing the log data, and to update the BSDSs to reflect the new data set using the change log inventory (DSNJU003) NEWLOG operation.

This message can also be issued as the result of a possible user error. If the data set name associated with the DSNAME value is missing, and the ERROR STATUS value contains '00180408' or '00100408', then the site is using dual logging, but only one set of active log data sets are defined in the BSDS. To resolve this condition, take one of the following actions:

- Define a second set of active log data sets using access method services (if they are not defined already), and update the BSDS log inventory using the DSNJU003 NEWLOG operation.
- To specify single logging, set the value of the TWOACTV subsystem parameter to NO.

Related concepts

Recovering from BSDS or log failures during restart (Db2 Administration Guide)

Related reference

z/OS DFSMSdfp Diagnosis

NUMBER OF COPIES field (TWOACTV subsystem parameter) (Db2 Installation and Migration)

DSNJU003 (change log inventory) (Db2 Utilities)

Related information

Recovering from active log failures (Db2 Administration Guide)

Recovering from archive log failures (Db2 Administration Guide)

DSNJ107I READ ERROR ON BSDS DSNAME=*name* ERROR STATUS=*status*

Explanation

The log manager encountered an error while reading the specified bootstrap data set. Error Status contains the VSAM return and feedback codes. It is a 2-byte field with the first byte containing the hexadecimal return code and the second containing the hexadecimal feedback code. Refer to the appropriate MVS publication for a description of VSAM return and reason codes.

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data). for information about recovery from BSDS or log failures.

System action

If dual BSDSs are available, the log manager attempts to read from the other BSDS. If read from the second BSDS fails or if there is only one BSDS, an error code is returned to the log request that caused access to the BSDS.

If read error is detected during start-up, Db2 initialization process is terminated to prevent users from operating in a cripple mode. User should take action to correct the problem.

Operator response

Notify the system programmer.

System programmer response

It may be necessary to replace or repair the BSDS, depending on what conditions resulted from the read error. To replace a BSDS, first delete the bad BSDS, and then define the new BSDS with the same name and attributes. If a new name is used for the new BSDS, change the log startup JCL to specify the new BSDS name.

DSNJ108I WRITE ERROR ON BSDS DSNAME=... ERROR STATUS=...

Explanation

The log manager encountered an error while writing to the specified bootstrap data set. Error Status contains the VSAM return and feedback codes. It is a 2-byte field with the first containing the hexadecimal return code and the second containing the hexadecimal feedback code. Refer to the appropriate VSAM publication for a description of VSAM return and reason codes.

System action

If dual BSDSs are available, the log manager enters single BSDS mode using the remaining good BSDS. Otherwise, an error code is returned to the log request that caused access to the BSDS.

Operator response

Notify the system programmer.

System programmer response

If dual BSDS mode is being used, execute an offline access method services job to rename the error BSDS and define a new BSDS with the same name. Then

enter the log manager -RECOVER BSDS command to reestablish dual BSDS mode.

If dual BSDS mode is not being used, the Db2 subsystem must be shut down, and the BSDS must be recovered from a backup copy. To recover the BSDS, use the change log inventory (DSNJU003) utility.

DSNJ109I OUT OF SPACE IN BSDS DSNAME=...

Explanation

The specified bootstrap data set does not have any more space. The operation that encountered the out-of-space condition did not complete properly.

System action

If dual BSDSs are available, the log manager enters single BSDS mode using the remaining good BSDS. Otherwise, an error code is returned to the log request that caused access to the BSDS.

This message is non-scrollable. It remains highlighted on the console until you take the appropriate action.

Operator response

Notify the system programmer.

System programmer response

If dual BSDS mode is being used, execute an offline access method services job to rename the full BSDS and define a new, larger BSDS with the same name. Enter the Db2 -RECOVER BSDS command to reestablish dual BSDS mode.

If dual BSDS mode is not being used, the Db2 subsystem must be shut down and the BSDS recovered offline. In this case, execute the same access method services job mentioned above to rename the full data set and define a larger data set. Next, execute an access method services REPRO job to copy the full BSDS into the new BSDS.

DSNJ110E LAST COPYn ACTIVE LOG DATA SET IS nnn PERCENT FULL

Explanation

This message is issued when the last available active log data set is 5% full, and is reissued after each additional 5% of the data set space is filled.

System action

Each time the message is issued, the offload processing is retried. If the situation is not corrected, the active log data space fills to capacity, message DSNJ111E is issued, and the Db2 online processing halts.

Operator response

To clear this condition, steps must be taken to complete other waiting offload tasks. Once an active log data set is made available (reusable) by completing the offload process for it, the Db2 logging activity can continue.

Execute an MVS *Display System Requests* command (D R,L for example) to determine the outstanding requests related to the log offload process. Take the necessary action to satisfy any requests, and permit offload to continue. If offload fails to complete normally or cannot be initiated, notify the system programmer.

System programmer response

Either correct the problem that is causing the offload process to fail, or add more active log data sets. The latter action requires Db2 to be down and the change log inventory (DSNJU003) utility to be run.

Possible causes for the shortage of active log data space are:

- Excessive logging. For example, too many users have requested logs at the same time or too many utilities have specified LOG(YES).
- Delayed or slow offloading. For example, failure to mount archive volumes, incorrect replies to offload messages, or slow device speeds.
- Excessive use of the -ARCHIVE LOG command. Each invocation of the -ARCHIVE LOG command causes the Db2 subsystem to switch to a new active log data set and to initiate an offload of the active log. Although the -ARCHIVE LOG command will not be processed when only one active log data set remains in a copy of the active log (see DSNJ319I), excessive use of the command could have consumed all space in the active log except the current active log data sets.
- Offloads failed. See Operator Response.
- Insufficient active log space. See Operator Response.
- Offload task no longer functioning. Issue the -ARCHIVE LOG CANCEL OFFLOAD command to abnormally terminate and restart the offload process.

DSNJ111E OUT OF SPACE IN ACTIVE LOG DATA SETS

Explanation

Due to delays in offload processing, all available space in all active log data sets has been exhausted. Db2 recovery logging cannot continue.

System action

The Db2 log manager waits for an available data set.

This message is non-scrollable. It remains highlighted on the console until you take the appropriate action.

Operator response

Execute an MVS Display System Requests command (`D R,L` for example) to ensure that there are no outstanding requests that are related to the log offload process. Take the necessary action to satisfy any requests, and permit offload to continue.

System programmer response

Examine the JES job log for the *ssnm*MSTR address space to determine the cause of the delay. If the delay was caused by the lack of a resource required for offload, the necessary resource must be made available to allow offload to complete and thus permit logging to proceed.

Related concepts

Effects of interruptions and errors on the offload process (Db2 Administration Guide)

Related information

Recovering from temporary resource failure (Db2 Administration Guide)

Recovering from active log failures (Db2 Administration Guide)

Recovering from being out of space in active logs (Db2 Administration Guide)

DSNJ112E ***csect-name*** **INSUFFICIENT ACTIVE LOG DATA SETS DEFINED IN BSDS**

Explanation

There are not enough active log data sets defined in the BSDS to start Db2. This condition usually exists for one of the following reasons.

- Fewer than two data sets are defined for one of the active log copy sets.
- DSN6LOGP specified TWOACTV=YES in Db2 initialization parameters, but data sets for two copies of active log are not defined in BSDS.
- Fewer than two data sets are available (not flagged as STOPPED) for one of the active log copy sets.

System action

Db2 startup is terminated.

Operator response

Notify the system programmer.

System programmer response

Use the change log inventory (DSNJU003) utility to make the number of active log data sets defined in the BSDS consistent with the parameters specified on DSN6LOGP. Log data sets that are flagged as 'STOPPED' will not be reused by Db2. These data sets must be recovered (either redefined or recovered from the other copy of the log) and the log data sets must be deleted and re-added to the BSDS (using DSNJU003) with the appropriate RBA's, to clear the STOPPED status. Restart Db2.

DSNJ113E **csect-name *log-type log-value* NOT IN ANY ACTIVE OR ARCHIVE LOG DATA SET. CONNECTION-ID=*aaaaaaaa*, CORRELATION-ID=*aaaaaaaa*, MEMBER-ID=*member-id***

Explanation

A request was made to read the log starting at this *log-value* and *log-type* (RBA or LRSN). However, the log value cannot be found in any active or archive log data set for the indicated member. The *member-id* contains the ID of the data sharing member whose logs were being requested at the time of the failure or zero if data sharing is not active. The connection and correlation IDs identify the user or application that encountered the problem. Correlation IDs beginning with '0nn' where 'nn' is a number from 01 to 28, identify system agents. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data). for information about recovery from log failures.

System action

Depending upon what log record is being read and why, this error could result in an abend with a reason code of '00D1032A'.

Operator response

Notify the system programmer.

System programmer response

This error could be a user error. In most cases, the archive log data set that contained the requested log

value has been deleted from the bootstrap data set (BSDS) by the change log inventory (DSNJU003) utility. Complete the following steps to correct the error:

- Locate the output from an old print log map run of the BSDS for the Db2 member identified by *member-id*.
- Identify the data set that contains the missing log value. If the data set has not been reused, run the DSNJU003 utility to add this data set back into the inventory of log data sets.
- Restart Db2.

DSNJ114I ERROR ON ARCHIVE DATA SET, OFFLOAD CONTINUING WITH ONLY ONE ARCHIVE DATA SET BEING GENERATED

Explanation

An error occurred while accessing one of the archive data sets being created by offload. Because the dual archive option is specified, offload is continuing with the other archive data set. For the RBA range being offloaded, there is only one copy of the archive data set instead of the usual two copies.

System action

Offload produces a single archive data set.

System programmer response

A second copy of this archive log data set can be made, and the BSDS can be updated with the change log inventory utility (DSNJU003).

DSNJ115I OFFLOAD FAILED, COULD NOT ALLOCATE AN ARCHIVE DATA SET

Explanation

Offload could not allocate or open an archive log data set. The offload was not performed. If this message is preceded by message DSNJ103I, the offload data set could not be allocated. If this message is not preceded by DSNJ103I, the offload data set was successfully allocated, but could not be opened.

System action

Offload will be tried at a later time.

Operator response

Notify the system programmer.

System programmer response

If the allocation failed with DSNJ103I, review the error status information of message DSNJ103I. Correct the condition that caused the data set allocation to fail so that, on retry, the offload can take place.

DSNJ116I ERROR ATTEMPTING TO ADD ARCHIVE ENTRY TO BSDS

Explanation

Offload could not add an archive entry to the BSDS. The offload is considered incomplete. The active log data set is not marked as reusable for new log data. This message is preceded by message DSNJ107I, DSNJ108I, or DSNJ109I.

System action

Offload will be retried at a later time.

Operator response

Notify the system programmer.

System programmer response

Refer to the specific preceding message for action.

DSNJ117I INITIALIZATION ERROR READING BSDS DSNAME=....., ERROR STATUS=...

Explanation

The log manager encountered an error during initialization reading from the specified bootstrap data set. Error status contains the VSAM return and feedback codes. It is a two byte field with the first containing the hexadecimal return code and the second byte containing the hexadecimal feedback code. Refer to the appropriate VSAM publication for a description of VSAM return and reason codes.

System action

Db2 startup is terminated.

Operator response

Notify the system programmer.

System programmer response

Determine the cause of the read error using the VSAM error status information provided. Restart Db2.

DSNJ118I LOG INITIALIZATION RECEIVED RETURN CODE nnn FROM xxxxxxxx MACRO

Explanation

Log manager initialization received a bad return code from the named macro.

System action

Db2 initialization is terminated.

Operator response

Notify the system programmer.

System programmer response

Determine the problem from the documentation on the named macro and return code. Then take appropriate steps, and restart the Db2 subsystem.

DSNJ119I BOOTSTRAP ACCESS INITIALIZATION PROCESSING FAILED

Explanation

During log manager initialization, the bootstrap data set access function was unable to complete its initialization process. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data). for information about recovery from BSDS or log failures.

System action

Db2 startup is terminated.

Operator response

Notify the system programmer.

System programmer response

One or more error messages describing the specific error have preceded this message. Refer to the specific message(s) for error analysis and the appropriate action to take.

DSNJ120I DUAL BSDS DATA SETS HAVE UNEQUAL TIMESTAMPS, BSDS1 SYSTEM=*timestamp*, UTILITY=*timestamp*, BSDS2 SYSTEM=*timestamp*, UTILITY=*timestamp*

Explanation

When the log manager was initialized, the timestamps of the dual bootstrap data sets (BSDS) did not agree. The timestamps from the system and from the change log inventory (DSNJU003) utility are shown for each BSDS. The timestamps have the format *yy.ddd hh:mm:ss.th*:

yy
Two-digit indicator for the year.

ddd
Three-digit indicator for the day of the year.

hh:mm:ss.th
Indicator for the time of the day.

System action

Db2 attempts to re-synchronize the BSDS data sets to restore dual BSDS mode. If re-synchronization is successful, Db2 restart continues.

Operator response

If restart fails, notify the system programmer.

System programmer response

If restart fails, run the print log map (DSNJU004) utility against each BSDS. From the output, determine which data set is obsolete, delete it, define a replacement for it, and copy the remaining BSDS to the replacement.

If output from the print log map (DSNJU004) utility for both data sets is similar, delete the data set with the oldest timestamp, and copy the data set with the most recent timestamp.

Related reference
DSNJU003 (change log inventory) (Db2 Utilities)
DSNJU004 (print log map) (Db2 Utilities)

DSNJ121I LOG MANAGER ENCOUNTERED AN ERROR READING THE JFCB. DDNAME=*nnnnnnnn*

Explanation

During log manager initialization (if dual BSDS data sets are specified), the job file control block (JFCB) in MVS is read to obtain the data set names associated with DDNAME BSDS1 and BSDS2. This error is caused by a missing DD statement.

System action

Db2 is terminated.

Operator response

Notify the system programmer.

System programmer response

Ensure that a DD statement exists in the Db2 startup procedure for DDNAME BSDS1. If dual BSDS data sets

are used, ensure that a DD statement also exists in the Db2 startup procedure for DDNAME BSDS2.

DSNJ122I DUAL BSDS DATA SETS ARE OUT OF SYNCHRONIZATION

Explanation

During log manager initialization or stand-alone utility initialization, the dual BSDS data sets were found to differ in content in one of the following ways:

- A record that exists in both BSDSs is not identical. (This comparison accounts for some minor differences.)
- A record exists in one BSDS and not in the other.
- A required record is missing from one BSDS copy.

The print log map (DSNJU004) utility does not print all of the information in the BSDS. Therefore, the output from DSNJU004 might be identical for two BSDSs, but the BSDSs might still be different.

Example scenarios that might cause this problem include the following situations:

- The change log inventory (DSNJU003) utility was used to alter one copy of a BSDS and not the other.
- Db2 was forced into single-BSDS mode due to an I/O error, and the stopped BSDS copy was not recovered.

System action

Db2 startup is terminated if the problem is detected during log manager initialization. If the problem is detected by a stand-alone utility, the utility terminates with return code 4.

Operator response

Notify the system programmer.

System programmer response

If the message was issued by Db2 initialization, run DSNJU004 against each BSDS to determine which is more current. Delete the outdated copy, define a replacement for the deleted data set, and copy the remaining BSDS to the replacement by using IDCAMS REPRO.

If the message was issued by the DSNJCNVT utility, you can follow the same procedure as if the message was issued by Db2 initialization. Alternatively, DSNJCNVT can be run with the SYSUT2 DD statement omitted and a SYSUT1 DD statement that specifies the correct BSDS copy. The converted BSDS is written to the SYSUT3 data set and, if provided, the SYSUT4 data set.

Related reference

DSNJU004 (print log map) (Db2 Utilities)

DSNJCNVT (Db2 Utilities)

Related information

REPRO command (DFSMS Access Method Services for Catalogs)

DSNJ123I CHANGE LOG INVENTORY FAILURE DETECTED

Explanation

During log manager initialization, the BSDS data set was found to have been incompletely processed by the change log inventory (DSNJU003) utility.

System action

Db2 startup is terminated.

System programmer response

Run the print log map (DSNJU004) utility to determine what operation against the BSDS did not complete. Run the change log inventory (DSNJU003) utility against the BSDS(s) to allow any unfinished processing to be completed.

DSNJ124I OFFLOAD OF ACTIVE LOG SUSPENDED FROM RBA *xxxxxx* TO RBA *xxxxxx* DUE TO I/O ERROR

Explanation

During offload, an unrecoverable I/O error was encountered on an active log data set. The data set experiencing the error is marked unusable, and no further logging is done to that data set.

System action

Active log data sets continue to be offloaded as they become full.

Operator response

Notify the system programmer to initiate recovery actions.

System programmer response

Complete the following steps:

1. Recover the data manually from the data set.
2. Copy it to an archive data set.
3. Run the change log inventory (DSNJU003) utility to make the new archive data set available to the Db2 subsystem.

4. Remove the error-prone active log data set from Db2 by using the change log inventory utility.

DSNJ125I ERROR DUMPING BSDS, OFFLOAD CONTINUING WITHOUT PRODUCING THE BSDS DUMP

Explanation

An error occurred while dumping the bootstrap data set (BSDS) during the offload process. The data set is not produced, but the offload process continues. The volume containing the offloaded data set does not contain a BSDS for recovery use.

System action

The system continues the offload process without producing a dump of the bootstrap data set.

DSNJ126I BSDS ERROR FORCED SINGLE BSDS MODE

Explanation

The log manager encountered an I/O error or a VSAM logical error on a bootstrap data set. This message is preceded by message DSNJ107I or DSNJ108I.

System action

The log manager enters single BSDS mode using the remaining BSDS.

This message is non-scrollable. It remains highlighted on the console until you take the appropriate action.

Operator response

Notify the system programmer.

System programmer response

Execute an offline access method services job to rename the error BSDS and define a new BSDS with the same name. Then enter the log manager - RECOVER BSDS command to reestablish dual BSDS mode.

DSNJ127I SYSTEM TIMESTAMP FOR BSDS=*timestamp*

Explanation

When the log manager is initialized, the system timestamp for the bootstrap data sets (BSDS) is displayed. The timestamp has the format *yy.ddd hh:mm:ss.th*:

yy
Two-digit indicator for the year.

ddd
Three-digit indicator for the day of the year.

hh:mm:ss.th
Indicator for the time of the day.

This time stamp should be close to the last time at which this subsystem was stopped. If it not, then it might indicate that a restart is being attempted with the wrong BSDS.

System action

Db2 startup continues.

Operator response

If the time displayed is not close to the time when this subsystem was last stopped, contact the system programmer.

System programmer response

If you cannot explain the apparent time discrepancy, cancel the subsystem. From the startup procedure for the subsystem services address space, determine the data set names of the bootstrap data sets and run the print log map (DSNJU004) utility. Check whether the active and archive log data sets all belong to this subsystem. If not, then change the startup procedure for the subsystem services address space to use the correct bootstrap data sets.

Related reference
DSNJU004 (print log map) (Db2 Utilities)

DSNJ128I LOG OFFLOAD TASK FAILED FOR ACTIVE LOG *nnnnn*

Explanation

The offload task abended while attempting to offload the relative byte address (RBA) range in active log data set 'nnnnn'.

System action

The offload task terminates and the archive data sets allocated to the offload task are deallocated and deleted. The status of the active log data sets involved in the failed offload processing remains set to 'not reusable'.

The log offload task will be re-initiated by one of several events. The most common are:

- All the available space in the current active log data set has been used (normal case).
- A DSNJ110E message is issued.

- The database system services address space (*ssnm*MSTR) is started, but data in the active log has not been archived.
- An I/O error occurs on the active log, which will force the system to truncate and offload the active log data set, and switch to a new active log data set.

Operator response

This message is the result of an offload failure, and will be preceded by one or more Db2 messages (for example, DSNJ073I) and/or MVS ABEND messages (for example, IEC030I, IEC031I, IEC032I). If Db2 is operating with restricted active log resources (see message DSNJ110E), quiesce the system to restrict logging activity until the ABEND or the DSNJ110E condition can be resolved. Notify the system programmer.

System programmer response

This message is the result of an offload failure, and will be preceded by one or more Db2 messages (for example, DSNJ073I) and/or MVS ABEND messages (for example, IEC030I, IEC031I IEC032I). Investigate and correct the cause of the ABEND before the offload is attempted again by Db2.

Problem determination

This message is the result of an offload ABEND and will be preceded by one or more Db2 messages and/or MVS ABEND messages. See the documentation for the associated Db2 and/or MVS messages to formulate a course of corrective action. Use the print log map (DSNJU004) utility to print the BSDS (both copies if running in dual mode), and then use the DSNJU004 output to determine the current status of the active and archive log data sets.

This message can be generated for a variety of reasons. However, the most likely are:

- Archive log data set allocation errors. Refer to the text for message DSNJ103I for corrective action.
- The size of the archive log data set is too small to contain the active log data set(s) during offload processing. All secondary space allocations have been used. This condition is normally accompanied by MVS ABEND message IEC030I.
- All available space on the DASD volume(s) to which the archive data set is being written has been exhausted. This condition is normally accompanied by MVS ABEND message IEC032I.
- The primary space allocation for the archive log data set (as specified in subsystem parameters) is too large to allocate to any available online DASD device. This condition is normally accompanied by MVS ABEND message IEC032I.

DSNJ129I **END OF *log-rba eol-rba* X COULD NOT BE FOUND IN ANY ACTIVE LOG DATA SET HIGHEST RBA FOUND WAS *hi-rba* X**

Explanation

The log manager has been requested to find 'eol-rba', the log record which has been recorded in the bootstrap data set (BSDS) as the highest RBA written. This RBA cannot be found in any active log data set. The highest RBA which could be found in any active data set was 'hi-rba'.

System action

Db2 startup processing is terminated.

Operator response

Notify the system programmer.

System programmer response

Most likely, the active log data set containing the requested RBA has been deleted from the BSDS by the change log inventory (DSNJU003) utility. If the data set has not been reused, run DSNJU003 to add this data set back into the BSDS. Restart Db2.

If the data set is not available, a conditional restart must be performed to either truncate the log prior to the RBA value of the missing data set, or to cold start at a higher RBA value. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data). for more information.

DSNJ130I **ICF CATALOG NAME IN BSDS DOES NOT AGREE WITH DSNZPARM. BSDS CATALOG NAME=*name*, DSNZPARM CATALOG NAME=*name***

Explanation

The ICF catalog name defined in DSNZPARM does not agree with the name contained in the bootstrap data set (BSDS).

System action

Db2 startup is abended.

Operator response

If you attempt to start the Db2 subsystem, you will receive this same message and abnormal termination will result until the problem is resolved.

System programmer response

Change the ICF catalog name in the BSDS to agree with the name defined in DSNZPARM during Db2 initialization. To change the ICF catalog name in the BSDS, use the BSDS change log inventory (DSNJU003) utility with the NEWCAT control statement.

User response

Notify the system programmer.

Problem determination

During log manager initialization, the ICF catalog name defined in DSNZPARM is compared to the catalog name in the BSDS to ensure that the catalog name used by the log manager during Db2 processing is correct. These names were found not to be the same.

DSNJ131I ***csect-name*** **DUAL BSDS MODE RESTORED FROM BSDS*n***

Explanation

Dual BSDS mode has been restored using BSDS copy *n*. This copy is the BSDS data set with the most recent system timestamp.

System action

Db2 startup continues.

DSNJ132I ***csect-name*** **ARCHIVE LOG READ ERROR DSNAME=*data-set-name*, *diag-information***

Explanation

An I/O error occurred attempting to read from archive log data set *data-set-name*. The value for *diag-information* contains a portion of the message text generated by the SYNADAF macro to describe the error. The generated message text contains information such as jobname, stepname, unit address, device type, ddname, operation attempted, and error description.

System action

Db2 will attempt the read request on a secondary copy of the archive log, if it is available. If a secondary copy of the archive does not exist, or this error occurs on the secondary copy of the archive log, the log read request fails with reason code 00D10329.

Operator response

Notify the system programmer.

System programmer response

If the archive log read request is satisfied by a secondary archive log data set, no immediate response is required. Otherwise, attempt to determine the cause of the I/O error and recover the archive data set as required. For example, if the archive log data set has been reblocked by moving or copying the data set, or by an HSM recall, it could result in a 'wrong length record' error. Use IEBGENER, or an equivalent program, to restore the data set with the original DCB information.

DSNJ138I ***csect-name*** **OFFLOAD COMPLETE FOR LOG TRUNCATION FROM AN ARCHIVE LOG COMMAND, ENDRBA=*xxxxxxxxxxxx***

Explanation

This message indicates that the offload of the truncated active logs, resulting from an -ARCHIVE LOG command, has completed successfully. *xxxxxxxxxxxx* is the ENDRBA of the truncated active logs and the newly created archive log data sets.

DSNJ139I **LOG OFFLOAD TASK ENDED**

Explanation

Processing of the active log offload ended.

System action

This message is written to the MVS console.

Operator response

This message does not guarantee that the offload completed without errors. Check the console log and task messages to review the execution of the offload task to determine whether any abnormal events occurred during the offload.

DSNJ140I ***csect-name*** **INVALID BSDS RELEASE LEVEL ACTIVE=*xxxxxx* ARCHIVE=*yyyyyy* DSN=*zzzzzz***

Explanation

At initialization time Db2 detected that the BSDS log records are not at the proper release level for this release of Db2. 'xxxxxx' contains the release level for the ACTIVE log records and 'yyyyyy' contains the release level for the ARCHIVE log records. 'zzzzzz' contains the data set name for the BSDS encountering the error.

System action

Db2 startup will be terminated.

Operator response

Notify the system programmer so operating procedures can be changed.

System programmer response

Run the appropriate conversion program (DSNJMIG0 or DSNJFAL0) to convert the BSDS data set to a compatible release level.

DSNJ150E LOG CAPTURE EXIT ABEND, EXIT DEACTIVATED

Explanation

An abnormal program interrupt was detected while executing in the installation-supplied log capture exit code (i.e. entry point DSNJW117 in load module DSNJL004). As a result of the abend, the log capture exit will no longer be active; log data will no longer be available for Exit capture/processing.

This message can only occur when an installation-supplied log capture exit (entry DSNJW117) is active for this instance of Db2.

System action

The log capture exit (entry point DSNJW117) is terminated. No further calls will be attempted for this Db2 instance. A full dump is provided for diagnostic purposes.

This message is non-scrollable. It remains highlighted on the console until you take the appropriate action.

Operator response

Notify the system programmer.

System programmer response

Determine the cause of the DSNJL004 load module (DSNJW117 entry point) abend and take corrective action.

Attention: A correctly-functioning copy of load module DSNJL004/entry DSNJW117 must be available in order to start Db2. If the problem which caused the above abend cannot be corrected, ensure that the default DSNJW117 entry (load module DSNJL004 - supplied with the Db2 release) is available during the next Db2 subsystem start.

User response

See “System Programmer Response” below.

DSNJ151I *csect-name* IN READING *log-type log-value*, A NONZERO REASON CODE WAS RETURNED. CONNECTION-ID=*connection-id*, CORRELATION-ID=*correlation-id*, REASON-CODE=*reason-code*, MEMBER-ID=*member-id*

Explanation

Db2 could not successfully complete the read of this *log-value* and *log-type* (RBA or LRSN) due to reason code 'ccc'. The *member-id* contains the ID of the data sharing member whose logs were being requested at the time of the failure or zero if data sharing is not active. The user or application that encountered the error is identified by the connection and correlation ID. Messages that have the same connection ID and correlation ID relate to the same application. Correlation IDs beginning with '0*nn*', where *nn* is a number from 01 to 28, identify system agents.

System action

Db2 attempts to recover from the error.

System programmer response

If Db2 was able to recover from the error and successfully complete the application, no further action is required. If the application abnormally terminated or Db2 could not recover successfully, this message is followed by one or more messages. Refer to the information in this message and the subsequent messages to determine the appropriate corrective action.

Related concepts

Recovering from BSDS or log failures during restart (Db2 Administration Guide)

Related reference

DSN1LOGP (Db2 Utilities)

Related information

Recovering from active log failures (Db2 Administration Guide)

Recovering from archive log failures (Db2 Administration Guide)

DSNJ152I *csect-name* ERROR ENCOUNTERED WHEN ATTEMPTING TO BUILD ARCHIVE LOG VOLUME LIST. CONNECTION-ID=*collection-id*, CORRELATION-ID=*correlation-id*, REASON-CODE=*reason-code*

Explanation

An error occurred while attempting to create the Archive Log Volumes report. An RBA range could not be successfully mapped into one or more archive data sets due to reason code 'ccc'. The user or application that encountered the error is identified by the connection and correlation ID. This message might be preceded by one or more related error messages. Messages that have the same connection ID and correlation ID relate to the same user. Correlation IDs beginning with '0*nn*', where '*nn*' is a number from 01 to 28, identify system agents.

This failure could be caused by one or more missing archive log data sets, or a system error (for example, an I/O error reading BSDS).

The Archive Log Volumes report (see message DSNJ330I) is not produced. In addition, no premounting of tapes is possible.

System action

The user or application continues execution. The physical read process for the user or application continues until the job completes normally or terminates abnormally. The job can terminate abnormally if the error is encountered again when the data set is physically required for the read process.

System programmer response

If the user or application completes successfully, no further action is necessary. If the user or application does not complete successfully, refer to the messages related to the actual failure to determine the appropriate corrective actions.

Related concepts

Recovering from BSDS or log failures during restart (Db2 Administration Guide)

Related reference

DSN1LOGP (Db2 Utilities)

Related information

Recovering from active log failures (Db2 Administration Guide)

Recovering from archive log failures (Db2 Administration Guide)

DSNJ330I
ARCHIVE LOG VOLUMES REQUIRED FOR CONNECTION ID conn-id CORRELATION ID corr-id

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DSNJ153E ***csect-name*** **CRITICAL LOG READ ERROR CONNECTION-ID =** ***connection-id*** **CORRELATION-ID =** ***correlation-id*** **LUWID =** ***logical-unit-of-work-id=token*** **REASON-CODE =** ***reason-code***

Explanation

While processing a Db2 must-complete function, Db2 encountered an error during an attempt to access the required log data sets.

CONNECTION-ID, CORRELATION-ID, and LUWID together identify the thread associated with the request. *token* is a unique token number associated with the LUWID. *reason-code* identifies the most recent log-read failure.

System action

The DSNJ154I message requests to retry the log-read request, and immediately follows this error message. Db2 will wait for a reply to message DSNJ154I before retrying the failed log-read request, or before abending.

This message is non-scrollable. It remains highlighted on the console until you take the appropriate action.

System programmer response

Review the description of the reason-code associated with the log-read failure. Examine the system console log for additional messages regarding the log- read error. Correct the cause of the error, if possible, and reply 'Y' to the DSNJ154I message in order to retry the log-read request. If it is not possible to correct the problem causing the log-read errors, and the failing log read request is the result of a thread rollback or -RECOVER POSTPONED command, consider canceling the log read request with the -CANCEL THREAD NOBACKOUT or -RECOVER POSTPONED CANCEL command. If canceling the log read request is not an option, quiesce the work on the Db2 system before replying 'N' to the DSNJ154I message in preparation for Db2 termination.

Related reference

-CANCEL THREAD (Db2) (Db2 Commands)

-RECOVER POSTPONED (Db2) (Db2 Commands)

Related information

DSNJ154I
csect-name REPLY Y TO RETRY LOG READ REQUEST, N TO ABEND

DSNJ154I ***csect-name*** **REPLY Y TO RETRY LOG READ REQUEST, N TO ABEND**

Explanation

While processing a Db2 must-complete function, Db2 encountered an error during an attempt to access the required log data sets.

System action

The DSNJ153E message identifies the critical log-read error, and immediately precedes this message. Db2 will wait for the operator's reply to proceed with the log-read request.

Operator response

Notify the system programmer. When actions have been taken to correct the cause of the log-read errors, reply 'Y' to request a retry of the failing log-read request. A reply of 'N' will fail the log-read request and the task will abend. Db2 then terminates.

System programmer response

Review the description of the reason-code associated with the log-read failure, and examine the system console log for additional messages regarding the log-read error. Correct the cause of the error, if possible, and reply 'Y' to the DSNJ154I message to retry the log-read request. If it is not possible to correct the problem causing the log-read errors, quiesce the work on the Db2 system before replying 'N' to the DSNJ154I message in preparation for Db2 termination.

DSNJ156I INVALID BSDS CONVERSION, DSN=*dataset-name*

Explanation

During initialization time, Db2 detected an invalid BSDS. An invalid BSDS can result from a failure during a prior attempt to run a conversion program.

dataset-name
The data set name for the BSDS encountering the error.

System action

Db2 startup terminates.

System programmer response

The procedure for running the conversion program includes making a copy of the BSDS before conversion. Restore the BSDS to the original pre-conversion copy, and try the conversion again. After the conversion is successful, restart Db2.

Related reference
DSNJCNVB (Db2 Utilities)
DSNJCNVT (Db2 Utilities)

DSNJ157I BSDS HAS NOT BEEN CONVERTED, DSN=*ds-name*

Explanation

During restart, Db2 detected a BSDS that was neither created in nor converted to the format that allows 10,000 archive logs.

ds-name
The data set name of the BSDS that encountered the error.

System action

Db2 startup is terminated.

System programmer response

Run the DSNJCNVB program and restart Db2.

Related concepts
The extended 10-byte RBA and LRSN in Db2 11 (Db2 for z/OS What's New?)
Related tasks
Migration step 17: Start Db2 11 (Db2 Installation and Migration)
Related reference
DSNJCNVT (Db2 Utilities)
DSNJCNVB (Db2 Utilities)

DSNJ158I *csect-name* ACTIVE LOG DATA SET DSN=*dsname* IS GREATER THAN 4 GB IN SIZE

Explanation

An active log data set has a size of greater than 4 GB, but new function is not activated in Db2 Db2 12. Before function level 500 is activated in Db2 12, the maximum supported active log data set size is 4 GB.

dsname
The name of the active log data set that caused the error.

System action

The system action depends on when the Db2 database manager detects that the data set size is too big:

- During processing of the -SET LOG NEWLOG command:

  The -SET LOG NEWLOG command fails.
- During Db2 startup:

  Db2 abnormally terminates with reason code 00E80084.

System programmer response

The system programmer response depends on when the Db2 database manager detects that the data set size is too large:

- During processing of the -SET LOG NEWLOG command:
  1. Reallocate the data set with a size of less than 4 GB.
  2. Issue -SET LOG NEWLOG
- During Db2 startup:
  1. Take one of the following actions:
     - Reallocate the data set with a size of less than 4 GB.

       Tip: If the error occurs during migration to Db2 12, take this action. When you run the premigration job DSNTIJPM, report 24 identifies active log data sets with a size greater than 4 GB.
     - Run the DSNJU003 utility with the DELETE *dsname* control statement to delete the active log data set from the bootstrap data set.
  2. Restart Db2.

Related tasks

Run premigration queries (DSNTIJPM) (Db2 Installation and Migration)

Related reference

-SET LOG (Db2) (Db2 Commands)

DSNJU003 (change log inventory) (Db2 Utilities)

DSNJ159I ***csect-name*** **ACTIVE LOG DATA SET DSN=*dsname* IS GREATER THAN 768 GB IN SIZE**

Explanation

An active log data set has a size of greater than the maximum supported size, 768 GB.

dsname
The name of the active log data set that caused the error.

System action

The system action depends on when the Db2 database manager detects that the data set size is too big:

- During processing of the -SET LOG NEWLOG command:

  The -SET LOG NEWLOG command fails.
- During Db2 startup:

  Db2 abnormally terminates with reason code 00E80084.

System programmer response

The system programmer response depends on when the Db2 database manager detects that the data set size is too big:

- During processing of the -SET LOG NEWLOG command:
  1. Reallocate the data set with a size of less than 768 GB.
  2. Issue -SET LOG NEWLOG
- During Db2 startup:
  1. Take one of the following actions:
     - Reallocate the data set with a size of less than or equal to 768 GB.
     - Run the DSNJU003 utility with the DELETE *dsname* control statement to delete the active log data set from the bootstrap data set.
  2. Restart Db2.

Related reference

-SET LOG (Db2) (Db2 Commands)

DSNJU003 (change log inventory) (Db2 Utilities)

DSNJ200I ***csect-name utility-name*** **UTILITY PROCESSING COMPLETED SUCCESSFULLY *member-name***

Explanation

Execution of a utility completed successfully.

csect-name
The name of the control section that issued the message.

utility-name
The name of the utility.

member-name
In a data sharing environment, the name of the data sharing member on which the utility ran. In a non-data sharing environment, the member name is set to UNKNOWN.

System action

Db2 writes this message to the SYSPRINT data set, not to a console.

DSNJ201I ***csect-name xxxxxxxx*** **UTILITY PROCESSING WAS UNSUCCESSFUL**

Explanation

The control section 'csect-name' was unable to successfully complete processing of 'xxxxxxxx' utility.

System action

The current utility is terminated. Db2 writes this message to the SYSPRINT data set, not to a console.

User response

Review other messages produced by the utility to determine the appropriate action to be taken.

DSNJ202I ***csect-name*** **INSUFFICIENT VIRTUAL STORAGE AVAILABLE TO CONTINUE WITH UTILITY**

Explanation

A GETMAIN macro instruction has failed, because virtual storage is unavailable for the job-step.

System action

The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.

User response

Rerun the utility after providing a larger virtual storage allocation for the job-step.

DSNJ203I ***xxxxxxxx*** **OPERATION IS INVALID**

Explanation

The user entered a utility control statement operation of *xxxxxxxx* that is invalid.

The DSNJU003 utility fails if the DSNTIJGF job is used as part of disabling data sharing on a Db2 11 new-function mode BSDS that was not converted by the DSNJCNVT conversion utility.

System action

The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.

User response

Correct the control statement, and rerun the utility.

If disabling data sharing is required, convert the BSDS with the DSNJCNVT conversion utility before rerunning the utility.

DSNJ204I **xxxxxxxx PARAMETER IS INVALID**

Explanation

The user specified a utility control statement parameter of 'xxxxxxxx' that is invalid.

System action

The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.

User response

Correct the control statement, and rerun the utility.

DSNJ205I **xxxxxxxx PARAMETER HAS NO ARGUMENT**

Explanation

'xxxxxxxx' contains the name of a parameter that requires an argument.

System action

The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.

User response

Specify an argument for the identified parameter and then rerun the utility.

DSNJ206I **xxxxxxxx PARAMETER REQUIRES NO ARGUMENT**

Explanation

'xxxxxxxx' contains the name of the parameter that has been incorrectly followed by an = symbol.

System action

The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.

User response

Correct the control statement, and rerun the utility.

DSNJ207I ***csect-name*** **PARAMETERS INCONSISTENT WITH SPECIFIED OPERATION**

Explanation

The user has specified utility control statement parameters that are inconsistent with the specified utility operation.

System action

The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.

User response

Correct the control statement, and rerun the utility.

DSNJ208E ***csect name*** **MEMBER** ***member name*** **WAS NOT FOUND IN THE BSDS SPECIFIED IN THE GROUP DD STATEMENT.**

Explanation

You are running the print log map (DSNJU004) utility. No member record exists for this member in the bootstrap data set (BSDS) specified in the GROUP DD statement.

System action

The log map for this member is not printed. If the records for other members are requested and are found in the BSDS specified in the GROUP DD statement, they are printed.

User response

Use the DISPLAY GROUP command to verify that the member name is a valid name and that the member has successfully joined the group. Also verify that the BSDS specified in the GROUP DD statement is correct. If the member name and the BSDS name are correct, then the most likely causes of this message are:

- The 'missing member' never joined the group because it was never started.
- The member whose BSDS you specified in the GROUP DD statement was down when the missing member joined the group and has not been restarted.

To gather the information from the missing member, you can rerun the utility, using the BSDS DDNAME option to point to the missing member's BSDS. To avoid this problem in the future, make sure the BSDS named in the GROUP statement is from a recently started member.

DSNJ209I **ENDRBA VALUE MUST BE GREATER THAN STARTRBA VALUE**

Explanation

The 'STARTRBA' and 'ENDRBA' parameters specify an RBA range. Hence, the ENDRBA value must be greater than the STARTRBA value.

System action

The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.

User response

Correct the control statement, and rerun the utility.

DSNJ210I **OLD ICF CATALOG NAME=oldname, NEW CATALOG NAME=newname**

Explanation

Change log inventory (DSNJU003) utility processing for the NEWCAT control statement has completed successfully.

oldname
Either:

- The name of the prior ICF catalog or
- 'NULL' if no prior name existed.

newname
The name of the ICF catalog defined by the VSAMCAT keyword.

DSNJ211I **UNEXPECTED END OF DATA ON SYSIN DATA SET**

Explanation

Additional control statements were expected but could not be found.

System action

The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.

User response

Correct the control statement(s), and rerun the utility.

DSNJ212I ***csect-name*** **ERROR RETURNED FROM BSDS READ, RPLERRCD=*yy*, DDNAME=*xxxxxxxx***

Explanation

A VSAM GET was issued that resulted in a nonzero return code. 'yy' contains the error code returned by VSAM. 'xxxxxxxx' contains the ddname of the BSDS encountering the error.

System action

The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.

User response

The action taken is dictated by the return code. The BSDS may have to be recovered by use of a backup copy.

DSNJ213I ***csect-name*** **ERROR RETURNED FROM BSDS WRITE, RPLERRCD=*vsam-code*, DDNAME=*dd-name***

Explanation

A VSAM PUT or ERASE macro was issued, and it returned a nonzero return code.

csect-name
The name of the control section that issued the message.

vsam-code
The return code that was returned by VSAM.

dd-name
The data definition name of the BSDS that encountered the error.

System action

The current utility is terminated. Message DSNJ213I is written to the SYSPRINT data set. The message is not written to console.

User response

Use the VSAM return code information to resolve the problem. The BSDS might need to be recovered from a backup copy.

Related reference

VSAM Macro Return and Reason Codes (DFSMS Macro Instructions for Data Sets)

DSNJ214I **SPECIFIED DSNAME ALREADY EXISTS IN BSDS, DDNAME=xxxxxxxx**

Explanation

The user attempted a NEWLOG operation with a data set name that already exists in the BSDS. An entry is never made in a BSDS if the specified DSNAME currently exists in either the active or archive records of that BSDS. 'xxxxxxxx' contains the ddname of the subject BSDS.

System action

The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.

User response

Either correct the control statement and rerun the utility, or delete the existing DSNAME from the BSDS and rerun the utility.

DSNJ215I ***csect-name*** **SVC 99 INFORMATION REQUEST FOR DD NAME '*ddname*' FAILED. RC= *rc*, RSN= *rsncd*, AND INFO CODE *infocode*.**

Explanation

The DSNJU004 (print log map) utility requested information from the z/OS Dynamic Allocation facility about the indicated DD name, but the system was unable to provide the information.

csect-name
The name of the control section that issued the message.

ddname
The DD name.

rc
The return code from the z/OS DYNALLOC (SVC 99) service.

rsncd
The reason code from the z/OS DYNALLOC (SVC 99) service.

infocode
The information code from the z/OS DYNALLOC (SVC 99) service.

System action

If the information request was for the SYSIN DD statement, DSNJU004 assumes that the control statement was not provided. DSNJU004 attempts to continue the request by using the SYSUT1 DD statement to locate the BSDS to be mapped.

If the information request was for the DD name of a BSDS, the attempts to get information about BSDS data sets are stopped. If information about any BSDS data sets was previously acquired, the maps of those BSDS data sets are printed. Otherwise, the utility terminates.

System programmer response

See the reason code for DYNALLOC to determine the action to take.

Problem determination

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Collect the following diagnostic items:

- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- SYSPRINT output, including JCL, for the application program or batch job, and system messages that were issued. Make sure that MSGLEVEL=(1,1) on the JOB statement so that all diagnostic information is sent to SYSPRINT.

Related reference

Interpreting DYNALLOC return codes (MVS Programming Authorized Assembler Services Reference)

DSNJ216I NO SPACE IN BSDS FOR ADDITIONAL ACTIVE LOG ENTRIES, DDNAME=*xxxxxxxx*

Explanation

The maximum number of active log data sets is fixed. No further entries can be inserted after the maximum has been reached. *xxxxxxxx* contains the ddname of the subject BSDS.

System action

The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.

User response

Run the print log map utility to determine the current status of the BSDS. Subsequent actions can then be formulated, depending upon the status of the BSDS.

DSNJ217I SPECIFIED DSNAME DOES NOT EXIST IN BSDS, DDNAME=xxxxxxxx

Explanation

The DELETE operation specifies a DSNAME that cannot be found in the BSDS. 'xxxxxxxx' contains the ddname of the subject BSDS.

System action

The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.

User response

Correct the control statement, and rerun the utility.

DSNJ218I SPECIFIED VOLUME DOES NOT EXIST IN BSDS, DDNAME=xxxxxxxx

Explanation

The DELETE operation specifies a COPY1VOL or COPY2VOL argument that cannot be found in the BSDS. 'xxxxxxxx' contains the ddname of the subject BSDS.

System action

The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.

User response

Correct the control statement, and rerun the utility.

DSNJ219I *csect-name* OPEN ERROR, DDNAME=*xxxxxxxx*

Explanation

An error occurred when the CSECT 'csect-name' tried to open a data set named 'xxxxxxxx'.

This error can be caused by a number of different conditions. The most probable conditions are:

1. The ddname of the SYSPRINT, SYSIN, or SYSUT1 data set was not specified in the user's job control language (JCL).
2. The Db2 subsystem is currently executing.
3. The bootstrap data set (BSDS) was allocated by another job with a disposition (DISP) that conflicts with the DISP specified in the user's JCL.
4. The data set associated with 'xxxxxxxx' is already open, possibly due to an earlier system abend.
5. The user is not authorized to access the data set associated with 'xxxxxxxx'
6. Insufficient virtual storage is available to perform the OPEN command.
7. The catalog indicates that the data set associated with 'xxxxxxxx' has an invalid physical record size.

System action

The current utility is terminated.

Db2 writes this message to the SYSPRINT data set, not to a console.

User response

The user's action depends on the condition that caused the OPEN error. The following is a list of appropriate actions corresponding to the conditions listed in the explanation:

1. Provide the missing DD statements, and then rerun the utility.

2. Wait until the Db2 subsystem is inactive before running the utility again because the log utility cannot execute while the Db2 subsystem is active.
3. Correct the disposition conflict and then rerun the utility.
4. Submit an access method services (IDCAMS) VERIFY job against the data set associated with 'xxxxxxxx'. Rerun the log utility job.
5. In the case of an authorization failure, a separate message is usually generated from the authorization facility (RACF, for example). Investigate the authorization messages and obtain the proper authorization before running the utility again.
6. Insufficient virtual storage is usually accompanied by a separate error from the MVS operating system. Increase the REGION size on the JCL job step and rerun the utility.
7. Contact the system programmer.

Related tasks

Invoking stand-alone utilities (Db2 Utilities)

DSNJ220I BSDS IN CREATE MODE. NO DATA TO MAP, DDNAME=*nnnnnnnn*

Explanation

A utility found the BSDS to be in create mode, meaning it contains no data. *nnnnnnnn* contains the ddname of the BSDS data set.

System action

The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.

User response

Ensure that the BSDS data set name specified as input to the utility is correct.

DSNJ221I PREVIOUS ERROR CAUSED xxxxxxxx OPERATION TO BE BYPASSED

Explanation

Db2 encountered errors while processing a utility. These errors subsequently caused 'xxxxxxxx' to be bypassed.

This message is a warning only and is displayed after messages that specify the error or errors that caused the utility operation to abend. Note that the error or errors may not be associated with the current 'xxxxxxxx' operation; rather, under log utility processing, a significant error in any operation causes the control statements for this and any subsequent operations to be checked for syntax only. BSDS updates do not occur for any operation specified in this message.

System action

The log utility continues to process. However, for this and all subsequent operations, the bootstrap data set (BSDS) is not updated and the utility only checks the syntax of the control statements.

Db2 writes this message to the SYSPRINT data set, not to a console.

User response

Consult the previous messages and correct any errors that caused this message to be generated. Resubmit the log utility job for all operations that have been bypassed.

DSNJ222I INVALID SPECIFICATION OF xxxx PARAMETER ARGUMENT

Explanation

You specified the parameter 'xxxx'. This parameter is not valid for the argument.

System action

The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.

User response

Correct the parameter argument on the control statement, and rerun the utility.

DSNJ223I xxxx PARAMETER ARGUMENT EXCEEDS MAXIMUM ALLOWABLE LENGTH

Explanation

The argument value of the parameter named 'xxxx' exceeds the maximum length allowed.

System action

The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.

User response

Correct the parameter argument on the control statement, and rerun the utility.

DSNJ224I xxxx PARAMETER APPEARS TOO OFTEN

Explanation

The parameter named 'xxxx' was specified more than once on the same control statement.

System action

The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.

User response

Remove the redundant parameter, and rerun the utility.

DSNJ225I **xxxx OPERATION COMPLETED SUCCESSFULLY**

Explanation

The change log inventory (DSNJU003) utility operation named 'xxxx' completed successfully.

System action

This message is written to the SYSPRINT data set, not to a console.

DSNJ226I **SPECIFIED VOLUME ALREADY EXISTS IN BSDS, DDNAME=xxxxxxx**

Explanation

The specified volume currently exists in the archive log records of the BSDS. 'xxxxxxxx' specifies the ddname of the subject BSDS.

System action

The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.

User response

Either correct the parameter argument on the control statement, or delete the specified volume and rerun the utility.

DSNJ227I **NO SPACE AVAILABLE IN BSDS FOR ADDITIONAL ARCHIVE VOLUME ENTRIES, DDNAME=xxxxxxxx**

Explanation

The maximum number of archive volumes has been exceeded, and no more space is available for volume entries in the copy specified.

System action

The current utility is terminated.

User response

Delete some of the archive entries in the specified copy number, and rerun the utility.

DSNJ228I ***csect-name* LOG DEALLOCATION ERROR DSNAME=*dsname*, ERROR STATUS=*eeeeiiii*, SMS REASON CODE=*ssssssss***

Explanation

The log manager encountered an error while trying to dynamically deallocate the data set. Error status is the error reason code returned by MVS dynamic allocation.

System action

Log manager processing continues.

Operator response

Notify the system programmer.

System programmer response

The error status portion of this message contains the 2-byte error code (S99ERROR) followed by the 2-byte information code (S99INFO) from the SVC request block. If the S99ERROR code indicates an SMS deallocation error (97XX), then 'ssssssss' contains additional SMS reason code information obtained from S99ERSN. Refer to the *MVS/ESA SPL: Application Development Guide* for a description of these codes.

DSNJ229I ***csect-name* OPEN FAILED FOR SYSIN**

Explanation

An error occurred when the Db2 Print Log Map utility tried to open the SYSIN data set.

Possible causes are:

1. The DD name of the SYSIN data set was not specified in the user's job control language (JCL).
2. Insufficient virtual storage is available to perform the OPEN command.
3. The characteristics of the SYSIN data set are different from those expected by the print log map (DSNJU004) utility.

System action

DSNJU004 attempts to continue processing without an input control statement. Db2 writes this message to the SYSPRINT data set, not to the system console.

User response

Take one of the following actions based on the cause of the error.

1. Provide the missing DD statement and rerun the utility.
2. Insufficient virtual storage is usually accompanied by a separate error message from the MVS operating system. Increase the REGION size on the JCL job step and rerun the utility.
3. Check that the SYSIN data set is a fixed record format (blocked or unblocked) with an LRECL of 80. You might need to contact the system programmer for help if this is a JES data set.

Related tasks

Invoking stand-alone utilities (Db2 Utilities)

Related reference

Syntax and options of the DSNJU004 control statement (Db2 Utilities)

DSNJ230I LOG OFFLOAD SUBCOMPONENT INITIALIZATION PROCESSING FAILED

Explanation

During log manager initialization, the off-load function was unable to complete its initialization process.

System action

Db2 startup is terminated.

Operator response

Notify the system programmer.

System programmer response

One or more error messages describing the specific error preceded this message. Refer to the specific message(s) for error analysis and the appropriate actions to take.

DSNJ231I LOG COMMAND INITIALIZATION PROCESSING FAILED

Explanation

During log manager initialization, the log command function was unable to complete its initialization process.

System action

Db2 startup is terminated.

Operator response

The rest of subsystem termination will direct the actions you should take.

System programmer response

One or more error messages describing the specific error preceded this message. Refer to the specific message(s) for error analysis and the appropriate action to take.

This message will be of interest to the IBM support center when the problem is described.

DSNJ232I OUTPUT DATA SET CONTROL INITIALIZATION PROCESSING FAILED

Explanation

During log manager initialization, the output data set control function was unable to complete its initialization process.

System action

Db2 startup is terminated.

System programmer response

One or more error messages describing the specific error preceded this message. Refer to the specific message for error analysis and the appropriate action to take.

This message will be of interest to the IBM support center when the problem is described.

DSNJ233I ARCHIVE LOG READ INITIALIZATION PROCESSING FAILED

Explanation

During log manager initialization, the archive log read function was unable to complete its initialization process.

System action

Db2 startup is terminated.

Operator response

Notify the system programmer.

System programmer response

One or more error messages describing the specific error preceded this message. Refer to the specific message(s) for error analysis and the appropriate action to take.

DSNJ234I ARCHIVE LOG COMMAND QUIESCE INITIALIZATION PROCESSING FAILED

Explanation

During log manager initialization, the quiesce function which supports the -ARCHIVE LOG MODE(QUIESCE) command processing was unable to complete its initialization process.

System action

Db2 startup is terminated.

Operator response

Notify the system programmer.

System programmer response

One or more error messages describing the specific error preceded this message. Refer to the specific message(s) for error analysis and the appropriate action to take.

DSNJ235I OUTPUT BUFFER WRITER INITIALIZATION PROCESSING FAILED

Explanation

During log manager initialization, the output buffer writer function was unable to complete its initialization process.

System action

Db2 startup is terminated.

Operator response

Notify the system programmer.

System programmer response

One or more error messages describing the specific error preceded this message. Refer to the specific message(s) for error analysis and the appropriate action to take.

DSNJ236I BOOTSTRAP ACCESS TERMINATION PROCESSING FAILED

Explanation

During log manager termination, the bootstrap data set access function was unable to complete its termination process.

System action

Log manager shutdown continues to the next step.

Operator response

Notify the system programmer.

System programmer response

One or more error messages describing the specific error preceded this message. Refer to the specific message(s) for error analysis and the appropriate action to take.

DSNJ237I *csect-name* INVALID CONTROL STATEMENT. THE FIRST WORD MUST BE 'MEMBER'.

Explanation

The print log map (DSNJU004) utility read an invalid control statement from the SYSIN data set.

System action

DSNJU004 ignores the control statement and attempts to continue processing by looking for a SYSUT1 DD statement to describe the BSDS that is to be printed.

User response

Correct or remove the control statement and rerun the job.

Problem determination

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Collect the following diagnostic items:

- SYSPRINT output, including JCL, for the application program or batch job, and system messages that were issued. Make sure that MSGLEVEL=(1,1) on the JOB statement so that all diagnostic information is sent to SYSPRINT.

Related reference

DSNJU004 (print log map) (Db2 Utilities)

Sample DSNJU004 control statement (Db2 Utilities)

DSNJ238I LOG OFFLOAD TERMINATION PROCESSING FAILED

Explanation

During log manager termination, the offload function was unable to complete its termination process.

System action

Log manager shutdown continues to the next step.

Operator response

Notify the system programmer.

System programmer response

One or more error messages describing the specific error preceded this message. Refer to the specific messages for error analysis and the appropriate action to take.

DSNJ239I LOG COMMAND TERMINATION PROCESSING FAILED

Explanation

During log manager termination, the log command function was unable to complete its termination process.

System action

Log manager shutdown continues to the next step.

Operator response

Notify the system programmer.

System programmer response

One or more error messages describing the specific error preceded this message. Refer to the specific message(s) for error analysis and the appropriate action to take.

DSNJ240I OUTPUT DATA SET CONTROL TERMINATION PROCESSING FAILED

Explanation

During log manager termination, the output data set control function was unable to complete its termination process.

System action

The log manager shutdown continues to the next step.

Operator response

Notify the system programmer.

System programmer response

One or more error messages describing the specific error preceded this message. Refer to the specific message(s) for error analysis and the appropriate action to take.

DSNJ241I ARCHIVE LOG READ TERMINATION PROCESSING FAILED

Explanation

During log manager termination, the archive log read function was unable to complete its termination process.

System action

Log manager shutdown continues to the next step.

Operator response

Notify the system programmer.

System programmer response

One or more error messages describing the specific error preceded this message. Refer to the specific message(s) for error analysis and the appropriate action to take.

DSNJ242I ARCHIVE LOG COMMAND QUIESCE TERMINATION PROCESSING FAILED

Explanation

During log manager termination, the quiesce function which supports the -ARCHIVE LOG MODE(QUIESCE) command processing was unable to complete its termination process.

System action

Log manager shutdown continues to the next step.

Operator response

Notify the system programmer.

System programmer response

One or more error messages describing the specific error preceded this message. Refer to the specific message(s) for error analysis and the appropriate action to take.

DSNJ243I **OUTPUT BUFFER WRITER TERMINATION PROCESSING FAILED**

Explanation

During log manager termination, the output buffer writer function was unable to complete its termination process.

System action

Log manager shutdown continues to the next step.

Operator response

Notify the system programmer.

System programmer response

One or more error messages describing the specific error preceded this message. Refer to the specific message(s) for error analysis and the appropriate action to take.

DSNJ244I **LOG TERMINATION RECEIVED RETURN CODE nnn FROM xxxxxxxx MACRO**

Explanation

Log manager termination was passed a bad return code from the named macro.

System action

Log manager termination processing continues.

Operator response

Record the return code and macro-name, and notify the system programmer.

System programmer response

This message is associated with a failure in the named macro. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

DSNJ245I **CONDITIONAL RESTART - LOG TRUNCATION AT *xxx rrr*. REPLY *Y* TO CONTINUE, *N* TO CANCEL**

Explanation

The conditional restart control record in use indicates that the Db2 log should be truncated at the specified RBA or LRSN.*xxx* is replaced by either RBA or LRSN, and *rrr* is the value specified in the current record.

System action

If *Y*, Db2 startup continues. If *N*, Db2 startup is terminated.

Operator response

Reply *N* if the truncation is going to occur at an undesirable point. Notify system programmer. Reply *Y* to continue the restart.

System programmer response

Rerun the change log inventory (DSNJU003) utility to modify the conditional restart record.

DSNJ246I **CONDITIONAL RESTART - COLD START AT RBA *rrr*. REPLY *Y* TO CONTINUE, *N* TO CANCEL**

Explanation

The conditional restart control record in use indicates that Db2 is to be restart and that logging is to begin at the specified RBA.

System action

If *Y*, Db2 startup continues. If *N*, Db2 startup is terminated.

Operator response

Reply *N* if the truncation is going to occur at an undesirable point. Notify the system programmer. Reply *Y* to continue the cold start.

System programmer response

Rerun the change log inventory (DSNJU003) utility to modify the conditional restart record.

DSNJ247E ***csect-name* I/O ERROR DURING PROCESSING OF *rrr* RC = *rc*, REASON = *reason***

Explanation

The I/O error occurred at record '*rrr*'. '*rc*' indicates the return code received from the I/O operation. 'reason' indicates the reason code received from the I/O operation.

If a return code '4' was received, this indicates that the log manager detected a problem. If a return code '8' was received, this indicates a VSAM error.

System action

Db2 startup terminates.

Operator response

Notify the system programmer.

System programmer response

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

For a return code of '4', if you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data). For a return code of '8', execute an offline access method services job to determine the cause of the VSAM error.

DSNJ248I **ARCHIVE LOG READ DEALLOCATION INITIALIZATION PROCESSING FAILED**

Explanation

During log initialization, the archive log read deallocation process was unable to complete its initialization.

System action

Db2 startup is terminated.

Operator response

Notify the system programmer.

System programmer response

One or more error messages describing the specific error precede this message. Refer to these messages for error analysis and the appropriate action to take.

DSNJ249I **ARCHIVE LOG READ SCHEDULER INITIALIZATION PROCESSING FAILED**

Explanation

During log initialization, the archive log read scheduling process was unable to complete its initialization.

System action

Db2 startup is terminated.

Operator response

Notify the system programmer.

System programmer response

One or more error messages describing the specific error precede this message. Refer to these messages for error analysis and the appropriate action to take.

DSNJ250E ***csect-name*** **DATA SHARING REQUIRES ALL ACTIVE LOG DATA SETS TO BE DEFINED WITH SHAREOPTIONS(2 3) OR HIGHER.**

Explanation

Db2 detected an active log data set defined with share options that do not permit recovery operations in a data sharing environment. This message is followed by message DSNJ251E, which identifies the specific active log data set.

All active log data sets for a Db2 data sharing member must be defined with a minimum of SHAREOPTIONS(2 3) for successful Db2 initialization. See the description of message DSNJ251E for more details.

System action

The Db2 subsystem detecting this condition is terminated.

DSNJ251E ***csect-name*** **DATA SET** ***dsname*** **FAILS TO MEET THE MINIMUM REQUIRED SHAREOPTIONS FOR DATA SHARING.**

Explanation

The share options defined for the data set named in the message are too low to permit the data set to participate in a Db2 data sharing group. All active log data sets must be defined with SHAREOPTIONS(2 3) or higher in order to participate in a data sharing group.

System action

The Db2 subsystem detecting this error is terminated.

System programmer response

Using IDCAMS LISTCAT or TSO LISTCAT, display the share options of all of the active log data sets of all of the members in the data sharing group. For any active log data set that is defined with less than SHAREOPTIONS(2 3), use IDCAMS ALTER or TSO ALTER to alter the data set definitions to SHAREOPTIONS(2 3) or higher.

Problem determination

If you suspect an error in Db2, you might need to report the problem. For information about identifying

and reporting the problem, see Collecting diagnostic data (Collecting data).

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- IDCAMS LISTCAT output that shows the attributes of all active log data sets for the Db2 member that failed.

.

DSNJ252E ***csect-name*** **CURRENT DATA SHARING LRSN** ***current-lrsn*** **IS LESS THAN HIGH WRITTEN LRSN** ***high-lrsn***

Explanation

The current log record sequence number (LRSN) is less than the high written LRSN in the log. This condition indicates that the system time is now less than the time that is recorded earlier in the Db2 log data sets. To ensure that log records and database updates are applied in the correct order, Db2 data sharing requires that the LRSN always advances.

csect-name
The name of the control section that issued the message.

current-lrsn
The current log LRSN. This value is obtained from the system time-of-day (TOD) clock.

high-lrsn
The high written LRSN in the log.

System action

Db2 startup is terminated.

Operator response

Notify the system programmer.

System programmer response

Make sure that the system TOD clock was not set to an earlier date and time. If you are restarting Db2 on a remote Sysplex, make sure that the system TOD clock is not set to an earlier date and time than the primary Sysplex.

DSNJ253I ***csect-name alias-port*** **USE IS INVALID**

Explanation

The *alias-port* value has been used in an invalid manner. The error could be due to one of the following conditions:

- *alias-port* was specified after more than one alias-name parameter
- *alias-port* duplicates the port value for the PORT or RESPORT parameters which have been specified with this update, or are already stored in the BSDS

System action

The update of the BSDS will not be performed.

User response

Retry the BSDS update with unique *alias-port* values, which also do not match the values for the PORT or RESPORT parameters.

DSNJ254I ***xxxx*** **NUMBER OF PARAMETER ARGUMENTS EXCEED MAXIMUM VALUE**

Explanation

The number of arguments for the parameter named *xxxx* exceed the maximum value allowed.

System action

The current operation is terminated. This message is written to the SYSPRINT data set, but not written to a console.

User response

Change the number of parameter arguments on the control statement, and rerun the utility.

DSNJ255I ***csect-name*** **CONDITIONAL RESTART ENDTIME OF** ***end-time*** **WILL RESULT IN LOG TRUNCATION AT** ***xxxx yyyyyyyyyyyy***

Explanation

The conditional restart control record in use indicates that the Db2 log should be truncated with ENDTIME *end-time*. The ENDTIME value translates to truncation type *xxxx* with value *yyyyyyyyyyyy*. This value is either an LRSN value (for data sharing) or a STCK (store clock) value (for non-data sharing).

System action

Startup continues.

User response

Reply *Y* to the DSNJ245I WTOR if this value is the correct log truncation value.

DSNJ256I ***csect-name*** **CONDITIONAL RESTART RECORD INDICATES SYSPITR RESTART WITH NO LOG TRUNCATION**

Explanation

The conditional restart control record in use indicates that Db2 will be restarted in system recover pending mode without truncating the logs. No database update activity will be allowed, and Db2 will be in restricted access mode.

System action

Startup continues.

Operator response

Reply 'Y' to the DSNJ011I WTOR if this is correct.

DSNJ260I **csect_name BSDS CONVERSION FOR DDNAME=*nnnnnnnn* COMPLETED SUCCESSFULLY**

Explanation

The BSDS conversion utility issues this message to indicate a successful conversion for the BSDS data set specified by the *nnnnnnnn* DDNAME.

System action

Processing continues.

DSNJ261I **csect_name BSDS CONVERSION FOR DDNAME=*nnnnnnnn* WAS NOT SUCCESSFUL**

Explanation

The BSDS conversion utility issues this message to indicate conversion was not successful for the BSDS data set specified by the *nnnnnnnn* DDNAME.

System action

The action taken depends on whether dual BSDS data sets are specified, and if so, which conversion failed. The DDNAME in the message indicates the failing BSDS data set.

If dual BSDS data sets are specified, the SYSUT1 data set is converted first. If that conversion is successful, the SYSUT2 data set is then converted. A failure at this point does not affect the successful SYSUT1 conversion.

If conversion fails for the SYSUT1 data set, processing is terminated at that point. In this case, any SYSUT2 data set that was specified will not be converted.

User response

Review other messages produced by the utility to determine the cause of the failure and the resulting action to take.

DSNJ266I **WARNING - BSDS UTILITY TIMESTAMP MISMATCH DETECTED. PROCESSING TERMINATED.**

Explanation

Db2 detected a mismatch in the timestamps for the SYSUT1 and SYSUT2 BSDS copies during execution of a BSDS conversion utility. This mismatch indicates the possibility that the dual BSDSs are out of sync.

System action

The program terminates with no action taken.

System programmer response

Run the print log map utility (DSNJU004) against each BSDS. From the output, determine which data set is obsolete, delete it, and define a replacement for it. Then copy the remaining data set into the replacement and try the utility again.

If output from the print log map utility for both data sets is similar, delete the data set with the oldest timestamp, and copy the data set with the most recent timestamp into the replacement.

Related reference

DSNJU004 (print log map) (Db2 Utilities)
DSNJCNVB (Db2 Utilities)
DSNJCNVT (Db2 Utilities)

DSNJ301I ***csect-name*** **ERROR *action* ONLINE BOOTSTRAP DATA SET**

Explanation

During command processing for the -RECOVER BSDS command or the -ARCHIVE LOG command, an error occurred while performing an operation on the bootstrap data set (BSDS). The type of operation is specified in the 'action' keyword in the message text:

- **ACCESSING:** Unable to OPEN the BSDS.
- **READING:** Unable to read a required record from the BSDS.
- **UPDATING:** Unable to write a required record to the BSDS.

- **RESTORING DUAL:** The contents of the stable BSDS was successfully copied to the replacement BSDS; however, the Db2 subsystem was unable to successfully restore dual BSDS operation.

System action

If this message was received during processing of the -RECOVER BSDS command, the Db2 subsystem will continue in single BSDS mode. If this message was received during processing of the -ARCHIVE LOG command, the archive log history record in the BSDS will not be updated to reflect the occurrence of an -ARCHIVE LOG command; logging and the offload processing will continue.

Operator response

Inform the system programmer of the type of error that occurred, and whether the error occurred while processing a -RECOVER BSDS command or an -ARCHIVE LOG command.

System programmer response

If this message was received during processing of the -RECOVER BSDS command, recovery action must be performed on the bootstrap data set before reentering the command. If this message was received during processing of the -ARCHIVE LOG command, no action is necessary.

DSNJ302I ALLOCATION ERROR ON REPLACEMENT BSDS DSNAME=... ERROR STATUS=...

Explanation

The RECOVER BSDS command encountered an error while trying to dynamically allocate the specified data set. DSNAME is the data set name. Error Status is the error code and information code returned by MVS dynamic allocation.

System action

Processing of the command is terminated. The system continues in single BSDS mode.

Operator response

Determine the cause of the error from the error status contained in the message, and correct the condition. Then reenter the -RECOVER BSDS command.

System programmer response

The error status portion of this message contains the 2-byte error code (S99ERROR) followed by the 2-byte information code (S99INFO) from the SVC request block. Refer to the appropriate MVS publication for a description of these codes.

DSNJ303I WRITE ERROR ON REPLACEMENT BSDS DSNAME=... ERROR STATUS=...

Explanation

The -RECOVER BSDS command encountered an error while attempting to write to the specified bootstrap data set. Error Status contains the VSAM return and feedback codes. It is a 2-byte field with the first containing the hexadecimal return code and the second containing the hexadecimal feedback code.

System action

Processing of the command is terminated. The system continues in single BSDS mode.

Operator response

Notify the system programmer.

System programmer response

Execute an offline access method services job to delete or rename the replacement BSDS and define a new BSDS with the same name. Reenter the log manager -RECOVER BSDS command to reestablish dual BSDS mode.

DSNJ304I ERROR CLOSING REPLACEMENT BSDS DSNAME=... ERROR STATUS=...

Explanation

The -RECOVER BSDS command encountered an error while attempting to close the specified bootstrap data set. Error Status contains the VSAM return and feedback codes. It is a 2-byte field with the first containing the hexadecimal return code and the second containing the hexadecimal feedback code.

System action

Processing of the command is terminated. The system continues in single BSDS mode.

Operator response

Notify the system programmer.

System programmer response

Execute an offline access method services job to delete or rename the replacement BSDS and define a new BSDS with the same name. Reenter the log

manager -RECOVER BSDS command to reestablish dual BSDS mode.

DSNJ305I REPLACEMENT BSDS NOT EMPTY DSNAME=...

Explanation

The -RECOVER BSDS command was issued, but the replacement bootstrap data set was not empty; that is, it contained data.

System action

Processing of the command is terminated. Db2 continues in single BSDS mode.

Operator response

Notify the system programmer.

System programmer response

Execute an offline access method services job to delete or rename the error BSDS and define a new BSDS with the same name. Reenter the log manager -RECOVER BSDS command to reestablish dual BSDS mode.

DSNJ306I DUAL BSDS MODE ALREADY ESTABLISHED

Explanation

The -RECOVER BSDS command was issued, but Db2 was already in dual BSDS mode.

System action

The command is ignored.

DSNJ307I LOG INITIALIZED IN SINGLE BSDS MODE

Explanation

The -RECOVER BSDS command was issued, but the system was initialized in single BSDS mode.

System action

Processing of the command is terminated. The system continues in single BSDS mode.

DSNJ310I (A)SYNCHRONOUS ARCHIVE LOG COMMAND QUIESCE PROCESSING STARTED FOR MAXIMUM OF xxx SECONDS

Explanation

An -ARCHIVE LOG command with the MODE(QUIESCE) option has been accepted by the Db2 subsystem. The quiesce processing has commenced.

System action

The Db2 subsystem will attempt to stop all updates to Db2 resources within the time period specified in the message. Users/jobs operating on the Db2 subsystem will be allowed to reach a point of consistency (commit point) before being blocked from further update activity. Jobs and users will be suspended until they are released by Db2 following the initiation of the offload processing. If the Db2 subsystem can effectively block all users from performing updates before the maximum specified time, the offload will be initiated immediately, and normal processing will be resumed.

The message will display either the word SYNCHRONOUS or ASYNCHRONOUS, to inform the user of the type of quiesce processing which has been used.

- If the word SYNCHRONOUS is displayed, then the invoker used the WAIT(YES) option. This means that quiesce processing will be synchronous to the user; that is, the user can enter additional Db2 commands, but the commands will not be processed by the Db2 command processor until the quiesce processing has ended.
- If the word ASYNCHRONOUS is displayed, then the invoker used the WAIT(NO) option, or did not specify the WAIT option. This means that quiesce processing will be asynchronous to the user; that is, control will be returned to the invoker as soon as the quiesce task has been started. Thus, the Db2 command processor will accept - and process - any new Db2 commands while the quiesce task is running.

This message will be followed by message DSNJ311I or DSNJ317I.

Operator response

No operator response is necessary. However, it can be expected that users and jobs using Db2 resources will be suspended (queued) by Db2 through the duration of the specified time interval, or until the Db2 subsystem can be certain that all update activity has been effectively blocked. At some point, this message will be followed by the DSNJ311I message or DSNJ317I message.

DSNJ311I *csect-name* ASYNCHRONOUS LOG ARCHIVE (OFFLOAD) TASK INITIATED

Explanation

A user-initiated -ARCHIVE LOG command has been accepted by the Db2 subsystem. An asynchronous task to archive (offload) the active log data set has been started.

System action

The current active log data set(s) will be truncated and switched to the next available active log data set(s), and an asynchronous offload task will be initiated to archive the Active log data set(s).

The term ASYNCHRONOUS is used to indicate that control will be returned to the invoker as soon as the offload task has been started. Thus, the Db2 command processor will accept and process any Db2 commands while the offload task is running.

This message is followed by message DSNJ312I if the MODE(QUIESCE) option was used with the -ARCHIVE LOG command.

Operator response

The operator should respond per normal operational procedures when the offload task begins.

DSNJ312I ARCHIVE LOG QUIESCE ENDED. UPDATE ACTIVITY AGAINST DB2 RESOURCES IS NOW RESUMED.

Explanation

An -ARCHIVE LOG command with the MODE(QUIESCE) option was processed by the Db2 subsystem. As part of the MODE(QUIESCE) processing, an attempt was made to stop all new update activity against Db2 resources. This message signals the end of the quiesce processing, and the resumption of normal Db2 activity for all users and jobs which were blocked during the quiesce period.

This message follows message DSNJ311I or DSNJ317I.

System action

The Db2 subsystem has now resumed all normal Db2 activity for all users and jobs that were blocked during the quiesce period.

DSNJ313I PARAMETER SPECIFIED ON THE *keyword* KEYWORD (*value*) IS NOT IN THE RANGE OF ALLOWABLE VALUES

Explanation

This message was generated by an error occurring in one of the following commands:

- ARCHIVE LOG command with MODE(QUIESCE)
- SET ARCHIVE
- SET LOG

You specified a value for one of the command options that was outside of the range of allowed values.

System action

Processing for the ARCHIVE LOG, SET ARCHIVE, or SET LOG command is terminated. This message is followed by message DSN9023I.

Operator response

Correct the syntax and reissue the command.

Related reference

-ARCHIVE LOG (Db2) (Db2 Commands)

-SET ARCHIVE (Db2) (Db2 Commands)

-SET LOG (Db2) (Db2 Commands)

Related information

DSN9023I

csect-name verb-name pkw-name ABNORMAL COMPLETION

DSNJ314I *keyword-1* KEYWORD REQUIRES *keyword-2* KEYWORD TO ALSO BE SPECIFIED ON THE COMMAND

Explanation

A command was entered which specified the *keyword-1* keyword. However, use of the *keyword-1* keyword requires that the *keyword-2* keyword also be used.

System action

Command processing terminates for the -ARCHIVE LOG or -RECOVER BSDS command. This message is followed by message DSN9023I.

Operator response

Correct the syntax and reissue the command.

Related reference

-ARCHIVE LOG (Db2) (Db2 Commands)

-RECOVER BSDS (Db2) (Db2 Commands)

Related information

DSN9023I

csect-name verb-name pkw-name ABNORMAL COMPLETION

DSNJ315I -STOP DB2 MODE(FORCE) IN PROGRESS

Explanation

An attempt was made to issue an -ARCHIVE LOG command when a -STOP DB2 MODE(FORCE) command was already in progress.

System action

Command processing terminates for the -ARCHIVE LOG command. The -STOP DB2 MODE(FORCE) processing continues.

DSNJ316I SYSTEM QUIESCE ALREADY IN PROGRESS

Explanation

An attempt was made to issue an -ARCHIVE LOG command with the MODE(QUIESCE) option when a system quiesce was already in progress. The system quiesce could be the result of processing by another -ARCHIVE LOG MODE(QUIESCE) command, or by a -STOP DB2 MODE(QUIESCE) command.

System action

Command processing will terminate. The system quiesce currently in progress will continue.

DSNJ317I ARCHIVE LOG QUIESCE PERIOD EXPIRED. NUMBER OF OUTSTANDING UR'S = xxxx. ARCHIVE LOG PROCESSING WILL BE TERMINATED, AND UPDATE ACTIVITY AGAINST DB2 RESOURCES WILL BE RESUMED. HH:MM:SS

Explanation

An -ARCHIVE LOG MODE(QUIESCE) command was processed by the Db2 subsystem; however, the Db2 subsystem was not able to quiesce all update activity in the user-specified quiesce time interval.

System action

This message is informational only. The Db2 subsystem determined that 'xxxx' units of recovery (URs) did not reach a point of consistency during the quiesce period, and therefore could not be stopped from continuing their associated update processing.

Consequently, the -ARCHIVE LOG processing will be terminated. The current active log data set(s) will not be truncated, and will not be switched to the next available active log data set(s). The log archive (offload) task will not be created. All jobs and users suspended during the quiesce will be resumed, and normal update activity against Db2 resources will be commenced.

This message will be followed by the DSNJ312I message.

Operator response

Contact the system programmer.

System programmer response

A determination must be made whether the outstanding (non-quiesced) URs represent significant work.

Each user on the system has a unit of recovery if they are modifying Db2 resources. URs are also created by the Db2 subsystem itself for internal processing. Since the purpose of the MODE(QUIESCE) option is to have all URs reach a point of consistency (commit point) before the active log data set is truncated and offloaded, determine all outstanding non-queued jobs and users by using -DISPLAY THREAD and the MVS 'D A,L' operator command.

It should be noted that URs may be outstanding due to lock contention between a user or job which holds a resource (and has reached a point of consistency), and a user or job which wants a lock (and therefore cannot reach a point of consistency).

Before resubmitting the -ARCHIVE LOG command with the MODE(QUIESCE) option, either:

- Wait until the threads have been deallocated.
- Wait until the Db2 subsystem is less busy.
- Force the offending thread(s) to terminate.
- Use the TIME option to dynamically override and extend the maximum quiesce time period specified in subsystem parameters.
- Or, if having all URs reach a point of consistency in the active log is no longer critical, issue the -ARCHIVE LOG command without the MODE(QUIESCE) option.

Important: If the decision is made to use the -ARCHIVE LOG command without the MODE(QUIESCE) option, the active log data set(s) will be truncated without regard to quiescing activity on the Db2 subsystem. If the resulting archive log data set is used for recovery, it is possible that some URs may be found to be inflight, in-abort, in-commit, or indoubt during Db2 initialization.

If expiration of the quiesce period before all URs reach a consistent point are a chronic problem, you might need to adjust the value of the QUIESCE subsystem parameter.

Related reference

QUIESCE PERIOD field (QUIESCE subsystem parameter) (Db2 Installation and Migration)

-ARCHIVE LOG (Db2) (Db2 Commands)

Related information

DSNJ312I
ARCHIVE LOG QUIESCE ENDED. UPDATE ACTIVITY AGAINST DB2 RESOURCES IS NOW RESUMED.

DSNJ318I ARCHIVE LOG COMMAND ALREADY IN PROGRESS

Explanation

An attempt was made to issue an ARCHIVE LOG command when an ARCHIVE LOG command was already in progress. In data sharing, the ARCHIVE LOG command currently in progress could be initiated by another member.

Operator response

If the conflicting command satisfies your archival request, do not reissue the command. Otherwise, wait for the conflicting command to complete and then reissue the -ARCHIVE LOG command.

DSNJ319I *csect name* CURRENT ACTIVE LOG DATA SET IS THE LAST AVAILABLE ACTIVE LOG DATA SET. ARCHIVE LOG PROCESSING WILL BE TERMINATED.

Explanation

The -ARCHIVE LOG command was rejected because the current active log is the last available active log data set. To process the command when these conditions exist would cause the Db2 subsystem to exhaust its available active log resources and immediately halt processing.

System action

Processing for the command is terminated. If the situation is not corrected, the Db2 subsystem will issue the DSNJ110E message (if it has not already done so) as the available active log data space reaches critically low levels. Ultimately, message DSNJ111E will be issued when the available active log data space is exhausted, and the Db2 online processing will halt until active log space is made available.

Operator response

To clear this condition, steps must be taken to complete other waiting offload tasks. Once another active log is made available (re-usable) by completing the offload process for it, the command processing for the current active log can proceed.

Execute an MVS *Display System Requests* command (D R,L for example) to determine the outstanding requests related to the log offload process. Take the necessary action to satisfy any requests, and permit offload to continue. If offload fails to complete normally, or cannot be initiated, notify the systems programmer.

System programmer response

Either correct the problem that is causing the offload process to fail, or add more active log data sets. Note that the latter action requires Db2 to be down and the change log inventory (DSNJU003) utility to be run.

Possible causes for the shortage of active log data space are:

- Excessive logging. For example, too many users requesting logs at the same time, or too many utilities specifying LOG (YES).
- Delayed or slow offloading. For example, failure to mount archive volumes, incorrect replies to offload messages, or slow device speeds.
- Excessive use of the -ARCHIVE LOG command. Each invocation of the command causes the Db2 subsystem to switch to a new active log data set. Excessive use could consume the available active log data space if the resulting offloads were not processed in a timely manner.
- Off-loads(s) failed (see Operator Response).
- Insufficient active log space (see Operator Response).

User response

Notify the operator or system programmer.

DSNJ320I *csect-name* UNABLE TO PROCESS LOG TRUNCATION REQUEST DUE TO SUBSYSTEM COMPONENT *action* FAILURE

Explanation

While processing an -ARCHIVE LOG command, an internal request was made of the log buffer output routine to force-write the log buffers and to truncate and switch the active log to the next available active log data set(s). The request failed during the processing of the 'action' specified in the message.

System action

Processing for the command is terminated.

Operator response

Notify the system programmer.

System programmer response

This error is an internal error detected by the Db2 subsystem. The error may be caused by an unrelated ABEND in the Log Buffer Writer component (DSNJWxxx), by a -STOP DB2 MODE(FORCE) command, or by abnormal subsystem termination. Refer to messages and ABENDS which precede this message.

User response

Notify the system programmer.

DSNJ321I UNABLE TO CONTINUE ARCHIVE LOG QUIESCE DUE TO INTERNAL SUBSYSTEM ERROR. ARCHIVE LOG PROCESSING WILL BE TERMINATED, AND UPDATE ACTIVITY AGAINST DB2 RESOURCES WILL BE RESUMED.

Explanation

An -ARCHIVE LOG command with the MODE(QUIESCE) option was processed by the Db2 subsystem. As part of the MODE(QUIESCE) processing, an attempt was made to stop all new update activity against Db2 resources. During the internal subsystem interaction between the log manager and the recovery manager, an internal interface error was detected by the recovery manager.

System action

The -ARCHIVE LOG MODE(QUIESCE) processing is terminated. This message will be followed by message DSNJ312I after all users and jobs quiesced by the MODE(QUIESCE) processing are resumed.

Operator response

Notify the system programmer.

System programmer response

This error is an internal error detected by the Db2 subsystem. Retry the -ARCHIVE LOG MODE(QUIESCE) command. If the error persists, the active log data sets may be switched using the -ARCHIVE LOG command without the MODE(QUIESCE) option.

User response

Notify the system programmer.

DSNJ322I DISPLAY ARCHIVE REPORT FOLLOWS—

Explanation

This message displays output from the DISPLAY ARCHIVE command. This output contains information about archive log data sets that are in use for the subsystem or data-sharing member. For data-sharing environments, it does not include information about the entire group.

The output begins with the following lines that describe the basic characteristics of the archive units for reading the archive logs:

```
DSNJ322I  -DISPLAY ARCHIVE REPORT FOLLOWS-
                COUNT                    TIME
             (TAPE UNITS)              (MIN,SEC)
name          count                      time
name          count                      time
```

name
An identifier for the *count* and *time* values that follow on the same line.

name can have one of the following values:

DSNZPARM
The *count* and *time* values that follow are the values that were specified during Db2 installation. These values correspond to the following subsystem parameters:

- The *count* value is from the MAXRTU subsystem parameter.
- The *time* value is from the DEALLCT subsystem parameter.

CURRENT
The *count* and *time* values that follow are the current values in the Db2 subsystem. These values might be the same as the subsystem parameter values that are listed in the DSNZPARM line. However, if those values were overridden by the SET ARCHIVE command, this line lists those changed values.

count
The maximum number of tape units that can be allocated to concurrently read archive log tape volumes.

time
The length of time that an allocated archive read tape unit can remain unused before it is deallocated. The format is *minutes*,*seconds*.

After the information about archive units, the output contains the following lines:

```
================================================
ADDR  STAT  CORR-ID  VOLSER  DATASET_NAME
addr  status  corr-id  vname   dsname
...
END OF DISPLAY ARCHIVE REPORT.
```

These lines describe the archive log data sets that are being read. After the heading information, one line is displayed for each archive log data set that is being read. Each of those lines includes the following information:

addr
The physical address of the device that is allocated to read the archive log.

status
The status of the device, which can be one of the following values:

BUSY
The device is actively processing an archive log data set.

PREM
The device is active and allocated for premount.

AVL
The device is inactive and waiting for work.

RCAL
The archive data set is being recalled by HSM.

corr-id
The correlation id that is associated with the user of the device that is being processed. If the status is PREM or AVL, this column might contain *****, which indicates that a current user is not associated with this device.

vname
The name of the archive volume that is mounted at the device address.

dsname
If *status* is BUSY, PREM or RCAL, the name of the data set on the archive volume that is being processed.

If *status* is AVL, the name of the data set on the archive volume that was last processed.

If no archive logs are currently being read, the following message is displayed instead of the lines that describe the archive log data sets:

```
NO ARCHIVE READ ACTIVITY
```

System action

Processing continues.

User response

No action is required.

Related reference
-DISPLAY ARCHIVE (Db2) (Db2 Commands)
-SET ARCHIVE (Db2) (Db2 Commands)
READ TAPE UNITS field (MAXRTU subsystem parameter) (Db2 Installation and Migration)
DEALLOC PERIOD field (DEALLCT subsystem parameter) (Db2 Installation and Migration)

DSNJ330I ARCHIVE LOG VOLUMES REQUIRED FOR CONNECTION ID conn-id CORRELATION ID corr-id

Explanation

This message is the title for the ARCHIVE LOG VOLUMES report output. The ARCHIVE LOG VOLUMES report lists the archive log volumes needed by the correlation ID for that connection ID. This message is generated automatically by the archive read process at the first archive log tape mount for corr-id. This message precedes the other messages generated by this action.

This message, in combination with messages DSNJ331I and DSNJ332I, provides the formatted report for the ARCHIVE LOG VOLUMES requested.

conn-id
An identifier representing the 'connection name' used to establish the thread.

corr-id
An identifier associated with a specified thread. In TSO, it is either the authorization ID or the job name.

DSNJ331I avolume, avolume, avolume, avolume ...

Explanation

This message provides the tape volume information for the Archive Log Volumes report output.

avolume
The name of the archive log volume required for this correlation ID. An 'avolume' prefixed with an '*' signifies that the data on the archive log volume is also mapped by an active log data set. As such, the 'avolume' **might not** be required for the read process, since the data is read from the active log, if possible.

DSNJ332I END OF ARCHIVE LOG VOLUMES REPORT

Explanation

This message follows messages DSNJ330I and DSNJ331I and indicates that the ARCHIVE LOG VOLUMES report was generated successfully. The message number is not included in this message.

DSNJ333I *csect-name* SYSTEM CHECKPOINT INITIATED

Explanation

This message indicates that the SET LOG command processed successfully and that a system checkpoint has been initiated.

DSNJ334I **PARAMETER SPECIFIED ON THE *keyword* KEYWORD (VALUE) CONTAINS INVALID CHARACTERS**

Explanation

A -SET ARCHIVE command was processed by the Db2 subsystem. One of the command keywords specified a value that contains an invalid character.

System action

Processing for the -SET ARCHIVE command is terminated. This message is followed by the DSN9023I message.

Operator response

Correct the syntax and reissue the command.

Related reference
-SET ARCHIVE (Db2) (Db2 Commands)
Related information
DSN9023I
csect-name verb-name pkw-name ABNORMAL COMPLETION

DSNJ335I **INVALID KEYWORDS COMBINATION IN SET ARCHIVE COMMAND**

Explanation

This command requires that keyword COUNT or keyword TIME be specified. If both are omitted, the keyword DEFAULT must be specified. It is invalid to specify keyword DEFAULT when either the COUNT keyword or TIME keyword is specified.

System action

Processing for the -SET ARCHIVE command is terminated. This message is followed by the DSN9023I message.

Operator response

Correct the syntax and reissue the command.

Related reference
-SET ARCHIVE (Db2) (Db2 Commands)
Related information
DSN9023I
csect-name verb-name pkw-name ABNORMAL COMPLETION

DSNJ336I **UNABLE TO ALLOCATE TAPE UNIT FOR conn-id corr-id, x ALLOCATED, y ALLOWED.**

Explanation

An attempt to allocate a tape unit for connection ID 'conn-id' failed. The current maximum tape unit specified is 'y', but only 'x' are physically available.

System action

The 'conn-id corr-id' process is queued until either an allocated tape unit becomes free or more tape units are varied online and made available to the Db2 archive read task.

Operator response

This situation rectifies itself over time as currently allocated tape units become available. To improve throughput, vary additional tape units online and make them available to Db2. Note that a queue rescan is not attempted until the -SET ARC READ COUNT command is issued or when an allocated tape dismounts.

DSNJ337I **SET ARCHIVE COMMAND COMPLETED, COUNT (count) TIME (minute,second).**

Explanation

This message indicates that the -SET ARCHIVE command processed successfully and displays the current values for COUNT and TIME.

count
The value for the COUNT parameter

minute
The 'minute' value for the TIME parameter

second
The 'second' value for the TIME parameter

DSNJ339I ***csect-name* SET LOG COMMAND COMPLETED, *frequency-type*(*frequency-unit*)**

Explanation

This message indicates that the SET LOG command processed successfully, and displays the current checkpoint frequency. The checkpoint frequency remains in effect until Db2 is restarted or until the value is modified by a SET LOG or SET SYSPARM command.

csect-name
The name of the control section that issued the message.

frequency-type
Identifies how the checkpoint frequency is determined. Expected values are CHKTIME (for a frequency based on elapsed time) and LOGLOAD (for a frequency based on the number of log records that are written).

frequency-unit
Specifies the unit for the associated *frequency-type* value.

The checkpoint frequency is controlled by the following fields on installation panel DSNTIPL1:

- CHECKPOINT TYPE (CHKTYPE subsystem parameter)
- RECORDS/CHECKPOINT (CHKFREQ and CHKLOGR subsystem parameters)
- MINUTES/CHECKPOINT (CHKFREQ and CHKMINS subsystem parameters)

Multiple forms: This message has two forms. The short form is shown above. The long form is:*csect-name* SET LOG COMMAND COMPLETED, *frequency-type*(*frequency-unit*) OR *frequency-type*(*frequency-unit*)

The long form is used when both the number of minutes and number of log records were changed by the SET LOG command. The message shows the *frequency-type* and *frequency-unit* values for both.

System action

Processing continues, and Db2 issues a DSNJ371I message to show the current settings.

Related concepts
Checkpoint log records (Db2 Administration Guide)
Related tasks
Choosing a checkpoint frequency (Db2 Performance)
Related reference
-SET LOG (Db2) (Db2 Commands)
-SET SYSPARM (Db2) (Db2 Commands)
DSNTIPL1: Checkpoint parameters (Db2 Installation and Migration)
Related information
DSNJ371I
DB2 RESTARTED *time-date-1* RESTART RBA *rstrt-rba* CHECKPOINT FREQUENCY *quantity-and-type* LAST SYSTEM CHECKPOINT TAKEN *time-date-2*

DSNJ340I ***csect-name* COMMAND KEYWORD *xxx* IS ONLY VALID FOR DATA SHARING**

Explanation

An attempt was made to issue a Db2 command with KEYWORD *xxx* on a Db2 that was not initialized to participate in data sharing.

System action

The command request is rejected.

DSNJ341I ***csect-name* -ARCHIVE LOG COMMAND NOT ALLOWED, LOGGING IS SUSPENDED**

Explanation

An attempt to issue an -ARCHIVE LOG command failed because a -SET LOG SUSPEND command has suspended logging.

System action

Command processing terminates for the -ARCHIVE LOG command. You may reissue the command when logging has been resumed by the -SET LOG RESUME command.

DSNJ350I ***csect-name* (A)SYNCHRONOUS ARCHIVE LOG COMMAND QUIESCE PROCESSING STARTED IN DATA SHARING**

Explanation

The Db2 subsystem of a data sharing group accepted an ARCHIVE LOG command with the MODE(QUIESCE) option.

Each active Db2 member in the data sharing group performs the quiesce operation. The member originating the quiesce issues message DSNJ350I; all other members issue DSNJ310I as they start quiescing.

DSNJ351I ***csect-name* MEMBER *member name* STATUS=*member status***

Explanation

This message is one of a list of elements that display archive related status of the indicated member of the data sharing group. These member status messages are preceded by the message DSNJ359I and are followed by DSNJ361I.

member name identifies the member of the data sharing group.

member status indicates archive related status of the named member. It appears as one of the following:.

ABNORMALLY TERMINATING
The named member was undergoing abnormal subsystem termination at the time ARCHIVE LOG processing was active for the data sharing group. ARCHIVE LOG command processing for the remainder of the data sharing group terminates unsuccessfully.

ARCHIVE ALREADY ACTIVE
ARCHIVE LOG command processing was running at the named member at the time a succeeding ARCHIVE LOG command was issued. The succeeding ARCHIVE LOG command terminates unsuccessfully for the remaining members of the data sharing group.

CANCELED
ARCHIVE LOG command processing for the named member was canceled due to a problem encountered elsewhere in the data sharing group. The quiesce operation is interrupted and terminated and update activity against Db2 resources is resumed before command processing is terminated for the member.

COMMUNICATIONS FAILURE
A communications failure occurred between the named member and one or more other members in the data sharing group. The quiesce operation is interrupted and update activity against Db2 resources is resumed before command processing is terminated for the member. ARCHIVE LOG command processing for the remainder of the data sharing group terminates unsuccessfully.

FAILED
The named member was inactive at the time the ARCHIVE LOG command was issued. Termination of the Db2 subsystem for this member was abnormal. This status, if displayed for any member, will cause ARCHIVE LOG command processing for the entire data sharing group to terminate unsuccessfully.

NOT AVAILABLE
Archive command status for the named member could not be determined. This condition typically occurs when the named member fails to respond during ARCHIVE LOG command processing and is usually accompanied by message DSNJ353I and/or message DSNJ355I.

QUIESCED
The named member was active at the time the ARCHIVE LOG command was issued. Update activity against Db2 resources had successfully quiesced for that member (no active URs) in response to specifying MODE(QUIESCE).

QUIESCED/OFFLOADING
The named member was active at the time the ARCHIVE LOG command was issued. Update activity against Db2 resources had successfully quiesced for that member (no active URs) in response to specifying MODE(QUIESCE). The active log at the time was truncated and an offload process was initiated after all members in the data sharing group had reached a quiesce point.

STOPPED
The named member was inactive at the time the ARCHIVE LOG command was issued. Termination of the Db2 subsystem for this member was normal with no incomplete URs outstanding. Log truncation and offload processing are scheduled to be performed automatically the next time the named member is started. When the member is started, it is important to ensure that archive processing occurs automatically. Certain error conditions might require entering an ARCHIVE LOG command via the operator console to cause log truncation and offload processing to be performed. This member status is accompanied by warning message DSNJ362A.

TIME EXCEEDED
The named member could not quiesce its update activity within the allotted period of time. The incomplete quiesce operation is interrupted and update activity is resumed before command processing is terminated for the member. ARCHIVE LOG command processing for the remainder of the data sharing group is unsuccessfully terminated.

DSNJ352W ***csect-name*** **MEMBERS WERE NOT OFFLOADED**

Explanation

Db2 issues this message during processing of an ARCHIVE LOG command with the MODE(QUIESCE) option. One or more quiesced members were not available to receive the archive request. DSNJ351I messages follow to display the quiesced members.

At the next start up of the quiesced member, Db2 switches (truncates) the current active log and initiates the archive task.

DSNJ353I ***csect-name*** **DSNJ353I MEMBER** ***member name*** **NOT RESPONDING.**

Explanation

This message is displayed when a response is needed but not received within an expected period of time during ARCHIVE LOG MODE(QUIESCE) command processing. This can occur as a result of abnormal subsystem termination under the named member or,

possibly from communications problems among members of the data sharing group.

Operator response

Examine the console log of the named member for operator information messages that might relate to the problem.

DSNJ354I ***csect-name*** **DSNJ354I ARCHIVE LOG: ALL ACTIVE MEMBER(S) STARTED OFFLOAD TASKS**

Explanation

This message is displayed when MODE(QUIESCE) is specified with the ARCHIVE LOG command, after all active members in the data sharing group have successfully quiesced their update activity within the allotted time period. For each active member in the data sharing group, the active log is truncated and switched, and an offload task is initiated to begin the offload process. Log truncation, switch and offload processing for stopped (and quiesced) members is performed the next time they are started.

DSNJ355I ***csect-name*** **ARCHIVE LOG: ONE OR MORE ACTIVE MEMBERS FAILED TO RESPOND OR START OFFLOAD TASKS**

Explanation

This message is displayed when MODE(QUIESCE) is specified with the ARCHIVE LOG command, and one or more active members could not successfully quiesce their update activity in the time allotted. Subsystem activity already quiesced is resumed, and ARCHIVE LOG command processing terminates unsuccessfully for all active members in the data sharing group. Message DSNJ353I might also appear with this message.

Operator response

See the list of DSNJ351I member status messages following message DSNJ359I to determine the reason for the archive command failure.

DSNJ356I ***csect-name*** **COMMUNICATIONS FAILURE TERMINATED COMMAND**

Explanation

This message appears as a result of the failure of a communications request by one or more members of the data sharing group. This message is likely to be accompanied by DSN7xxx or other error messages and/or an SVC dump.

System action

ARCHIVE LOG command processing terminates unsuccessfully for all members in the group.

DSNJ357E ***csect-name*** **SYSTEM QUIESCE FAILED**

Explanation

This message indicates the unsuccessful outcome of an ARCHIVE LOG MODE(QUIESCE) command. This message indicates that one or more members were unable to quiesce their update activity in the time allowed. It is usually accompanied by one or more related messages (e.g., DSNJ355I), and a list of member status messages indicating the reason for the failure.

Operator response

Refer to messages DSNJ359I, DSNJ351I and DSNJ361I to determine archive related status of members in the data sharing group.

DSNJ359I **MEMBER RESPONSES**

Explanation

This message marks the beginning of a list of one or more DSNJ351I member status messages and precedes the first status message in the list.

DSNJ361I ***csect-name*** **END OF MEMBER RESPONSES LIST**

Explanation

This message marks the end of a list of one or more DSNJ351I member status messages and follows the last status message in the list.

DSNJ362E ***csect-name*** **WARNING: LOGS OF *nn* STOPPED OR FAILED MEMBERS NOT OFFLOADED.**

Explanation

This message is displayed when either MODE(QUIESCE) or SCOPE(GROUP) is specified with the ARCHIVE LOG command, and one or more members of the data sharing group either stopped or failed and were not available to receive the archive request. Active log truncation, log switch and offload processing for these inactive members is scheduled to be performed the next time those members are started.

Operator response

Verify that log switch and offload processing does automatically occur when the inactive members are started. Certain error conditions might require the ARCHIVE LOG command to be individually issued for a member if ARCHIVE LOG processing does not occur automatically. Refer to messages DSNJ359I, DSNJ351I, and DSNJ361I to identify the inactive members.

DSNJ363I ***csect-name* COPY *log-copy* LOG DATA SET *dataset-name* ADDED TO THE ACTIVE LOG INVENTORY**

Explanation

The active log data set identified by*dataset-name* was successfully added to active log inventory with the SET LOG command. The log data set is now available for use by Db2.

csect-name
The name of the control section that issued the message.

log-copy
The new log copy.

dataset-name
The name of the data set.

System action

Processing continues.

User response

No action is required.

Related reference
-SET LOG (Db2) (Db2 Commands)

DSNJ364I **NEWLOG OPERATION FAILED. REASON: *reason-string***

Explanation

The NEWLOG option of the SET LOG command has failed. The value of *reason-string* describes the cause of the failure:

OPEN ERROR
An error occurred attempting to allocate or open the new log data set. Make sure that the NEWLOG data set name is correct and that the data set has been defined correctly with IDCAMS.

BSDS ERROR
An error occurred attempting to update the BSDS.

DUPLICATE LOG DATA SET NAME
The specified log data set name already exists in the current active log inventory. Make sure that the NEWLOG data set name is correct.

LOG COPY AT MAXIMUM NUMBER OF LOGS
The specified log copy already contains the maximum number of active log data sets. You can specify up to a maximum of 93 log data sets per active log copy.

COPY2 IN SINGLE LOGGING MODE
COPY(2) was specified but Db2 was started in single logging mode.

OUT OF SPACE IN BSDS
There is no space in the BSDS to add the new log data set information. This failure indicates a possible problem with the BSDS control record. If the problem persists, contact IBM Support Prepare an IDCAMS PRINT of the BSDS.

COMMAND ABENDED
An ABEND occurred during command processing.

System action

The command terminates.

User response

Examine the console log for messages related to the failure.

Related reference
-SET LOG (Db2) (Db2 Commands)

DSNJ370I ***csect-name* LOG DISPLAY CURRENT COPY1 LOG = *dsname1* IS *pct1*% FULL CURRENT COPY2 LOG = *dsname2* IS *pct2*% FULL H/W RBA = *hw-rba*, H/O RBA = *ho-rba* FULL LOGS TO OFFLOAD = *full-count* OF *total-count*, OFFLOAD TASK IS *status* SOFTWARE ACCELERATION IS *accel-status***

Explanation

This message displays output from the DISPLAY LOG command. The output from this command has the following general structure:

```
DSNJ370I  csect-name LOG DISPLAY
CURRENT COPY1 LOG = dsname1 IS pct1% FULL

CURRENT COPY2 LOG = dsname2 IS pct2% FULL

          H/W RBA = hw-rba
          H/O RBA = ho-rba
          FULL LOGS TO OFFLOAD = full-count OF
total-count
          OFFLOAD TASK IS status
          SOFTWARE ACCELERATION IS ENABLED
```

```
          DSNJ371I  DB2 RESTARTED time-date-1
          RESTART RBA rstrt-rba
          CHECKPOINT FREQUENCY quantity-and-type
          LAST SYSTEM CHECKPOINT TAKEN time-
date-2
DSN9022I  -DB2A DSNJC001 '-DIS LOG' NORMAL
COMPLETION
```

When both the number of minutes and the number of log records are used to determine the checkpoint frequency, the output includes the following alternative form of message DSNJ371I, which shows both values:

```
DSNJ371I  DB2 RESTARTED time-date-1
          RESTART RBA rstrt-rba
          CHECKPOINT FREQUENCY quantity-and-
type OR quantity-and-type
          LAST SYSTEM CHECKPOINT TAKEN time-
date-2
```

When the log is on a member of a data sharing group that is a component of a GDPS® Continuous Availability with zero data loss solution, message DSNJ375I follows message DSNJ371I:

```
DSNJ375I csect-name CDDS DSNAME=dsname3 IS cdds-
status IN
          cdds-mode MODE.
```

csect-name
The name of the control section that issued the message.

dsname1
The name of the current active log COPY 1 data set. This data set is used for the first copy of the active log. If the value for *dsname1* is INACTIVE, this copy of the log is not currently active.

pct1
The percentage of log space in the active log COPY 1 data set that has been used for writing log records.

dsname2
The name of the current active log COPY 2 data set. This data set is used for the second copy of the active log. If the value for *dsname2* is INACTIVE, this copy of the log is not currently active.

pct2
The percentage of log space in the active log COPY 2 data set that has been used for writing log records.

hw-rba
The RBA of the most recently written log record.

ho-rba
The highest log RBA that has been offloaded to an archive log data set.

full-count
The number of full active log data sets that have not been archived.

total-count
The total number of active log data sets.

status
The status of the offload task. *status* can be one of the following values:

BUSY,ALLC
The task is busy allocating an archive log data set. This status might indicate that a tape mount request is outstanding.

BUSY,BSDS
The task is busy copying the bootstrap data set (BSDS).

BUSY,ACTV
The task is busy copying an active log data set.

BUSY
The task is busy with other processing.

AVAILABLE
The task is available for work.

accel-status
The status of software-controlled mirroring, either ENABLED or DISABLED based on the setting of the REMOTE_COPY_SW_ACCEL subsystem parameter.

time-date-1
The time and date when Db2 started.

rstrt-rba
The RBA that Db2 began logging when it started.

quantity-and-type
The number of minutes or the number of log records that determine the current checkpoint frequency.

time-date-2
The time and date of the last system checkpoint.

dsname3
The name of the compression dictionary data set (CDDS) that interprets the log.

cdds-status
The status of the CDDS. *cdds-status* can be one of the following values:

ACTIVE
The CDDS is accessible for read/write access in the source data sharing group. The CDDS is accessible for read/only access in the proxy data sharing group.

INACTIVE
The CDDS is not accessible for read/write access in the source data sharing group. The CDDS is not accessible for read/only access in the proxy data sharing group.

cdds-mode
The purpose of the data sharing group to which the log belongs:

SOURCE
The data sharing group supports replication of its log data sets by another data sharing group.

PROXY
The data sharing group supports replication of log data sets for another data sharing group.

Related concepts

Checkpoint log records (Db2 Administration Guide)

Related tasks

Choosing a checkpoint frequency (Db2 Performance)

Related reference

LOG COPY 1, BSDS 2 field (Db2 Installation and Migration)

LOG COPY 2, BSDS 1 field (Db2 Installation and Migration)

CHECKPOINT TYPE field (CHKTYPE subsystem parameter) (Db2 Installation and Migration)

RECORDS/CHECKPOINT field (CHKFREQ and CHKLOGR subsystem parameters) (Db2 Installation and Migration)

-DISPLAY LOG (Db2) (Db2 Commands)

Related information

DSN9022I
csect-name '*verb-namepkw-name*' NORMAL COMPLETION

DSNJ371I **DB2 RESTARTED *time-date-1* RESTART RBA *rstrt-rba* CHECKPOINT FREQUENCY *quantity-and-type* LAST SYSTEM CHECKPOINT TAKEN *time-date-2***

Explanation

This message is part of the output from the DISPLAY LOG command, which is described in message "DSNJ370I" on page 296.

DSNJ372I ***csect-name* UPDATE ACTIVITY HAS BEEN SUSPENDED FOR *aaaa* AT RBA *xxxxxxxxxxxx*, LRSN *yyyyyyyyyyyy*, PRIOR CHECKPOINT RBA *zzzzzzzzzzzz***

Explanation

This message indicates that the -SET LOG command with the SUSPEND option has completed successfully.

System action

All log and database update activity has been suspended for Db2 subsystem *aaaa*. *xxxxxxxxxxxx* contains the RBA of the last record written to the log. In a data sharing environment, *yyyyyyyyyyyy* contains the LRSN of the last record written to the log. Otherwise, *yyyyyyyyyyyy* contains the high written RBA. *zzzzzzzzzzzz* contains the RBA of the last system checkpoint.

This message is non-scrollable. It remains highlighted on the console until you take the appropriate action.

Operator response

Issue the -SET LOG command with the RESUME keyword when ready to resume update activity.

DSNJ373I ***csect-name* UPDATE ACTIVITY HAS BEEN RESUMED FOR *xxxx***

Explanation

This message indicates that the -SET LOG command with the RESUME option has completed successfully.

System action

All log and database update activity has been resumed for Db2 subsystem *xxxx*.

DSNJ374I ***csect-name* SET LOG *options* COMMAND FAILED, *reason***

Explanation

A -SET LOG command has failed. *options* were specified on the command. *reason* describes the cause of the failure:

ALREADY SUSPENDED
A -SET LOG SUSPEND command was issued while update activity was suspended by a previous command.

Db2 STOPPING
A -SET LOG SUSPEND command was issued, but Db2 is stopping.

QUIESCE ACTIVE
A -SET LOG SUSPEND command was issued, but a system quiesce that was initiated by an -ARCHIVE LOG command is in progress.

NOT SUSPENDED
A -SET LOG RESUME command was issued, but update activity is not suspended.

COMMAND ABEND
A -SET LOG command abnormally terminated. Update activity is not suspended.

LOCK TIMEOUT
A lock timeout has occurred. Update activity is not suspended.

System action

Command processing terminates.

DSNJ375I ***csect-name*** **CDDS DSNAME=*dsname3* IS *cdds-status* IN *cdds-mode* MODE.**

Explanation

This message is part of the output from the DISPLAY LOG command, which is described in message "DSNJ370I" on page 296. This message is also issued during Db2 startup in a GDPS Continuous Availability with zero data loss (GDPS Continuous Availability with zero data loss) environment.

csect-name
The name of the control section that issued the message.

dsname3
The name of the compression dictionary data set (CDDS) that interprets the log.

cdds-status
The status of the CDDS. *cdds-status* can be one of the following values:

ACTIVE
The CDDS is accessible for read/write access in the source data sharing group. The CDDS is accessible for read/only access in the proxy data sharing group.

INACTIVE
The CDDS is not accessible for read/write access in the source data sharing group. The CDDS is not accessible for read/only access in the proxy data sharing group.

cdds-mode
The purpose of the data sharing group to which the log belongs:

SOURCE
The data sharing group supports replication of its log data sets by another data sharing group.

PROXY
The data sharing group supports replication of log data sets for another data sharing group.

DSNJ376I ***csect-name*** **CDDS INITIALIZATION FAILED. CDDS SERVICES ARE UNAVAILABLE.**

Explanation

An error occurred during initialization of the compression dictionary data set (CDDS).

System action

CDDS initialization was terminated.

Operator response

Notify the system programmer.

System programmer response

This error is an internal error detected by the Db2 subsystem.

User response

Notify the system programmer.

DSNJ377I ***csect-name*** **CDDS ALLOCATION ERROR FOR DSNAME=*dataset-name*, ERROR STATUS=*status-indicator*, SMS REASON CODE=*ssssssss*.**

Explanation

The log manager encountered an error while it attempted to allocate the specified compression dictionary data set (CDDS).

csect-name
The name of the control section that issued the message.

dataset-name
The name of the data set.

status-indicator
The error reason code that is returned by z/OS MVS dynamic allocation (SVC99). This value consists of a 2-byte error code (S99ERROR) followed by a 2-byte information code (S99INFO) from the SVC99 request block.

ssssssss
If available, more SMS reason code information from S99ERSN, which is a field of S99RBX. *ssssssss* is displayed if the S99ERROR code indicates an SMS allocation error (97*xx*).

System action

Operator response

Notify the system programmer.

System programmer response

DSNJ378I ***csect-name*** **CDDS DEFINE ATTRIBUTE ERROR FOR DSNAME=*dataset-name*.**

Explanation

One or more attributes of the compression dictionary data set (CDDS) was incorrectly specified.

csect-name
The name of the control section that issued the message.

dataset-name
The name of the data set.

System action

CDDS processing was terminated.

Operator response

Notify the system programmer.

System programmer response

Check whether the data set allocation attributes for the CDDS are specified correctly.

User response

Notify the system programmer.

Problem determination

Run LISTCAT on the CDDS, and compare the data set attributes to those that are specified in Modifying Db2 for the GDPS Continuous Availability with zero data loss solution (Db2 Administration Guide).

DSNJ379I ***csect-name function*** **ERROR ON CDDS DSNAME=*dataset-name*.**

Explanation

An error occurred when the specified function was performed on the specified compression dictionary data set (CDDS).

csect-name
The name of the control section that issued the message.

function
The function that was performed on the CDDS.

dataset-name
The name of the data set.

System action

CDDS processing was terminated.

Operator response

Notify the system programmer.

System programmer response

This error is an internal error detected by the Db2 subsystem.

User response

Notify the system programmer.

DSNJ380I ***csect-name*** **OUT OF SPACE IN CDDS DSNAME=*dataset-name*.**

Explanation

The specified compression dictionary data set (CDDS) does not have any more space. The operation that encountered the out-of-space condition did not complete properly.

csect-name
The name of the control section that issued the message.

dataset-name
The name of the data set.

System action

An error code is returned to the log request that caused access to the CDDS.

Operator response

Notify the system programmer.

System programmer response

Follow these steps to avoid data loss while defining a new, larger CDDS:

1. Stop replication by the proxy group to avoid data loss. If you are using a replication product that uses subscription sets, stopping replication avoids the need to refresh a large number of subscription sets.
2. Stop one of the least active members of the source data sharing group.
3. Delete the CDDS, and define a larger CDDS with the same name.
4. Start the member of the source data sharing group that you stopped. This action causes system control records to be inserted in the new CDDS.
5. Run REORG TABLESPACE with the INITCDDS option on one of the following sets of table spaces:
   - All table spaces that contain tables that are defined with DATA CAPTURE CHANGES
   - All table spaces that contain tables that are in replication subscription sets
6. Start replication by the proxy group.

User response

Notify the system programmer.

DSNJ381I ***csect-name*** **CDDS CONTROL RECORD ERROR FOR DSNAME=*dataset-name*, REASON CODE=*reason-code*.**

Explanation

A request to read from or write to the system control record in the specified compression dictionary data set (CDDS) failed.

csect-name
The name of the control section that issued the message.

dataset-name
The name of the data set.

reason-code
The Db2 reason code value that indicates the reason for the failure. For explanations of reason codes, see Db2 reason codes (Db2 Codes).

System action

CDDS processing was terminated.

Operator response

Notify the system programmer.

System programmer response

This error is an internal error detected by the Db2 subsystem. See the description of the reason code that is specified in the message text for more information about the error.

User response

Notify the system programmer.

Related information

00D10A0C (Db2 Codes)
00D10A0D (Db2 Codes)
00D10A0E (Db2 Codes)
00D10A0F (Db2 Codes)
00D10A13 (Db2 Codes)
00D10A20 (Db2 Codes)

DSNJ382I ***csect-name*** **CDDS CRITICAL PROCESSING FAILED. CDDS SERVICES ARE UNAVAILABLE.**

Explanation

An error occurred during processing of the compression dictionary data set (CDDS).

System action

CDDS processing was terminated.

Operator response

Notify the system programmer.

System programmer response

This error is an internal error detected by the Db2 subsystem.

User response

Notify the system programmer.

DSNJ383I ***csect-name*** **CDDS *function* ERROR FOR DSNAME=*dataset-name*, ERROR STATUS=*mvs-return-code*,*mvs-reason-code***

Explanation

An error when the specified compression dictionary data set (CDDS) was opened.

csect-name
The name of the control section that issued the message.

function
The function that was performed on the CDDS.

dataset-name
The name of the data set.

mvs-return-code
The return code issued by the z/OS MVS macro.

mvs-reason-code
The reason code issued by the z/OS MVS macro.

System action

CDDS processing was terminated.

Operator response

Notify the system programmer.

System programmer response

Use the VSAM OPEN return code and reason code information to resolve the problem.

User response

Notify the system programmer.

Related reference

OPEN return and reason codes (DFSMS Macro Instructions for Data Sets)

DSNJ401I ***csect-name rrrr*** **RECORD NOT FOUND**

Explanation

An attempt was made to read the 'rrrr' record from the BSDS. In so doing, the read routine (DSNJU01B) could not find the record.

System action

Utility processing continues. This message is written to the SYSPRINT data set, not to a console.

DSNJ402I **UNABLE TO LOCATE aaaa TBLSPACE NAME IN SYSTEM CATALOG OR DIRECTORY DATABASES**

Explanation

The table space name specified on the TBLSPACE parameter of the change log inventory (DSNJU003) utility SYSTEMDB statement could not be found in any Db2 subsystem catalog or directory database. The table space name in error is named in the 'aaaa' message keyword.

System action

All subsequent DSNJU003 utility statements are bypassed, and DSNJU003 processing is terminated with a return code of 4. The Db2 SYSTEMDB record is not updated.

This message is written to the SYSPRINT data set, not to a console.

User response

Correct the table space name specified on the TBLSPACE parameter, and resubmit the change log inventory (DSNJU003) utility job.

DSNJ403I **CAPACITY OF BSDS SYSTEMDB RECORD EXCEEDED**

Explanation

The BSDS SYSTEMDB record contains VSAM passwords for data sets in the Db2 catalog and directory, and has a maximum capacity of 168 entries. This message is issued when the number of eligible Db2 catalog and directory data sets exceeds the maximum capacity of the BSDS SYSTEMDB record. This is an internal error.

System action

All subsequent change log inventory (DSNJU003) utility statements are bypassed, and DSNJU003 processing is terminated with a return code of 4. The Db2 SYSTEMDB record is not updated.

This message is written to the SYSPRINT data set, not to a console.

User response

Notify the systems programmer.

DSNJ404E **keyword NOT ALLOWED FOR operation OPERATION**

Explanation

An invalid keyword was used during the operation named 'operation'.

System action

The current utility processing is terminated. This message is written to the SYSPRINT data set, not to a console.

User response

Correct the control statement and rerun the utility.

DSNJ405E **keyword1 KEYWORD MUTUALLY EXCLUSIVE WITH keyword2 KEYWORD**

Explanation

'keyword1' and 'keyword2' are mutually exclusive and cannot appear on the same control statement.

System action

The current utility processing is terminated. This message is written to the SYSPRINT data set, not to a console.

User response

Determine the extraneous keyword and remove it from the control statement. Rerun the utility.

DSNJ406E **EITHER keyword1 KEYWORD OR keyword2 KEYWORD MUST BE SPECIFIED**

Explanation

A required keyword was not used on the control statement. Use either 'keyword1' or 'keyword2' with the attempted control statement type.

System action

The current utility processing is terminated. This message is written to the SYSPRINT data set, not to a console.

User response

Correct the control statement and rerun the utility.

DSNJ407I ***csect-name*** **NO VALID CHECKPOINT RBA FOUND. LOG WILL BE SCANNED AT RESTART**

Explanation

After completing its search through the resource manager status table and the checkpoint queue, no valid checkpoint RBA was found within the specified range.

System action

Utility processing continues, and will set a return code of 4. This message is written to the SYSPRINT data set, not to a console.

User response

The last 100 checkpoints are recorded in the BSDS, including the log STARTRBA and log ENDRBA of the checkpoint range. When either STARTRBA or ENDRBA/ENDLRSN are specified, the change log inventory (DSNJU003) utility attempts to locate a valid checkpoint in the range. In this case, DSNJU003 was unsuccessful in finding a valid checkpoint. When Db2 is restarted, the log will be scanned to locate the checkpoint prior to the log truncation point.

DSNJ408I ***csect-name*** **CHECKPOINT RBA FOUND, RBA =** ***rba*****, TIME =** ***time***

Explanation

After completing its search through the resource manager status table and the checkpoint queue, 'rba' was the most recent checkpoint RBA in the specified range and 'time' was the time of the checkpoint.

System action

Utility processing continues.

DSNJ409I **UNABLE TO WRITE ACTIVE LOG RECORD TO THE BSDS DATASET. DDNAME=xxxxxx**

Explanation

A program encountered an I/O error when attempting to write a BSDS active log record to the BSDS data set. 'xxxxxx' is the DDNAME of the BSDS data set being accessed.

System action

The program will terminate.

Operator response

Notify the system programmer.

System programmer response

One or more error messages describing the specific error preceded this message. This error is considered unrecoverable and will leave the BSDS data set in an uncertain state. It will be necessary to either: re-create the data set using access method service routines and then use change log inventory (DSNJU003) to make the active and archive log data set(s) known to the BSDS, or recover the BSDS using a backup copy.

DSNJ410E ***csect-name*** **I/O ERROR DURING** ***operation-type*** **PROCESSING OF** ***error-record*** **RECORD**

Explanation

An attempt was made to read, write, or erase a record, but an I/O error occurred.

csect-name
The name of the control section that issued the message.

operation-type
The type of operation: READ, WRITE, or ERASE.

error-record
The record that could not be processed:

- Conditional restart control record
- Checkpoint queue record
- Archive log command history record
- Resource manager status table
- BSDS member record (BMEM)

System action

The current utility processing is terminated. Message DSNJ410E is written to the SYSPRINT data set, and is accompanied by message DSNJ212I or DSNJ213I. The message is not written to console.

User response

Use the information provided in message DSNJ212I or DSNJ213I to determine the cause of the I/O error. Correct the problem, and resubmit the job.

Related information

DSNJ212I
csect-name ERROR RETURNED FROM BSDS READ, RPLERRCD=*yy*, DDNAME=*xxxxxxxx*

DSNJ213I
csect-name ERROR RETURNED FROM BSDS WRITE, RPLERRCD=*vsam-code*, DDNAME=*dd-name*

DSNJ411I ***csect-name* CRESTART *nnnn* FOR CRCRID = *yyyy*, DDNAME = *ddname***

Explanation

A CRESTART request has just completed. 'nnnn' is either CREATE or CANCEL. 'yyyy' is the restart control record hexadecimal identifier and 'ddname' is the BSDS data set (SYSUT1 or SYSUT2) associated with the request.

System action

Current utility processing continues. This message is written to the SYSPRINT data set, not to a console.

User response

Note the record identifier for future reference.

DSNJ412E ***csect-name* RESTART CONTROL RECORD NOT FOUND IN BSDS**

Explanation

The CRESTART CANCEL keyword was specified but the conditional restart control record does not exist in the BSDS data set.

System action

Current utility processing is terminated. This message is written to the SYSPRINT data set, not to a console.

User response

CREATE the conditional restart control record prior to attempting the CANCEL function.

DSNJ413E ***csect-name* INVALID LOG RANGE SCOPE OR CHECKPOINT SPECIFIED**

Explanation

The values specified thru the STARTRBA, ENDRBA, and CHKPTRBA keywords are invalid.

System action

Current utility processing is terminated. This message is written to the SYSPRINT data set, not to a console.

User response

Ensure that the log range values are correct and correspond to the other log range values either specified or defaulted. A valid log range is where STARTRBA is less than or equal to CHKPTRBA, and CHKPTRBA is less than ENDRBA. The STARTRBA most be less than or equal to the ENDRBA.

DSNJ414I ***csect-name* COLD START WILL RESULT FROM THIS RESTART CONTROL RECORD. FORWARD AND BACKOUT SET TO NO.**

Explanation

STARTRBA and ENDRBA are equal. A cold start will result if this restart control record is used during Db2 restart. No forward or backout processing will be performed.

System action

CRESTART processing continues.

User response

No additional actions are required if a cold start of the system will be performed. If a cold start will not be performed, reissue the CRESTART and either CANCEL the current restart control record, or CREATE a new restart control record.

DSNJ415E ***csect-name* ENDRBA = *rba* IS INVALID, MUST BE A MULTIPLE OF 4K**

Explanation

The specified ENDRBA at 'rba' is not a multiple of 4KB.

System action

CRESTART processing is terminated.

User response

Correct the ENDRBA value on the CRESTART statement and rerun the utility.

DSNJ416I **WARNING - BSDS UTILITY TIMESTAMP MISMATCH DETECTED. PROCESSING CONTINUES.**

Explanation

As a result of a change log inventory (DSNJU003) update, it was discovered that the SYSUT1 BSDS and SYSUT2 BSDS timestamps are unequal. Being unequal indicates the possibility of a BSDS mismatch.

System action

Current utility processing continues.

User response

Run the print log map (DSNJU004) utility against the SYSUT1 BSDS and SYSUT2 BSDS. Determine if each BSDS is current. If each BSDS is current, this warning can be ignored. If either BSDS is not current, delete the obsolete data set and define a replacement data set, then copy the current BSDS into the replacement data set.

DSNJ417I **REQUIRED *xxxxxxxx* PARAMETER FOR *yyyyyyyy* OPERATION IS MISSING**

Explanation

A required parameter 'xxxxxxxx' for a Log utility operation was missing from the Log utility control statement. The attempted operation is 'yyyyyyyy'.

System action

The Log utility 'yyyyyyyy' operation does not perform its function. All subsequent Log utility control statements are processed. A nonzero return code is issued by the utility.

Db2 writes this message to the SYSPRINT data set, not to a console.

User response

Add the missing parameter to the control statements associated with the specified operation and rerun the utility.

DSNJ418I **WARNING - A NOTREUSEABLE ACTIVE LOG DATA SET WAS DELETED FROM BSDS LOG INVENTORY, STARTRBA=...,ENDRBA=...**

Explanation

The data set name specified on the DSNAME parameter of the change log inventory (DSNJU003) utility DELETE statement was a NOTREUSABLE active log.

System action

DSNJU003 processing continues, and will complete with a return code of 4. This message is written to the SYSPRINT data set, not to a console.

User response

No additional actions are required if a deletion of a NOTREUSABLE active log was intended. Otherwise, re-create the deleted log by using the NEWLOG statement with the RBA values specified in the warning message.

DSNJ419I **UNABLE TO WRITE ARCHIVE LOG RECORD TO THE BSDS DATASET. DDNAME=*xxxxxx***

Explanation

A program encountered an I/O error when attempting to write a BSDS archive record to the BSDS data set. 'xxxxxx' is the DDNAME of the BSDS data set being accessed.

System action

The program will terminate.

Operator response

Notify the system programmer.

System programmer response

One or more error messages describing the specific error preceded this message. This error is considered unrecoverable and will leave the BSDS data set in an uncertain state. It will be necessary to either: re-create the data set using access method service routines and then use change log inventory (DSNJU003) utility to make the active and archive log data set(s) known to the BSDS, or recover the BSDS using a backup copy.

DSNJ420I **UNABLE TO WRITE BCR1 RECORD TO BSDS DATASET. DDNAME=*xxxxxx***

Explanation

A program encountered an I/O error when attempting to write the BSDS control record to the BSDS data set. 'xxxxxx' is the DDNAME of the BSDS data set being accessed.

Operator response

Notify the system programmer.

System programmer response

One or more error messages describing the specific error preceded this message. Refer to the specific message(s) for error analysis and the appropriate action to take.

DSNJ421I THE BSDS IS NOT AT THE PROPER RELEASE LEVEL. DDNAME=*xxxxx*

Explanation

This message is issued when a program attempting to access The BSDS data set is not at a compatible release level. This can be one of the following:

- The program accessing the BSDS data set is at a NEW release level and the BSDS is at the old level.
- The program accessing the BSDS data set is at an OLD release level and the BSDS is at the NEW level.
- The program encountered an UNKNOWN release level on the BSDS data set.

System action

The program will terminate with no action taken.

System programmer response

If the program that encountered the error was one of the BSDS conversion programs (DSNJMIG0 or DSNJFAL0) an unrecoverable error was found on the BSDS data set and it must be re-created. If the error was encountered running some other utility program (i.e., change log inventory or print log map), one of the following actions may be taken:

- Run a version of the program that is compatible with the release level of the BSDS.
- Run the appropriate formatting program (DSNJMIG0 or DSNJFAL0) to convert the BSDS data set to a release level compatible with the running program. If this was successful, rerun the original program.

DSNJ422I LOG RECORDS HAVE ALREADY BEEN FORMATTED - THIS UTILITY WILL TERMINATE

Explanation

This message occurs when one of the BSDS formatting programs detects the BSDS had already been reformatted or was already at the required format level.

System action

The program will terminate without any action being taken.

System programmer response

If the appropriate BSDS formatting program was being run, no further action is necessary.

DSNJ423I ACTIVE LOG MAY NOT HAVE BEEN ARCHIVED. DSN=*xxxxxx*

Explanation

The program was attempting to convert an old BSDS data set with more than 31 active log data sets to the new format. The program will drop the oldest active log data set(s) to get to the new maximum (31) limit. When dropping one of the old active log data sets from the BSDS, it was found to have been flagged as NOT REUSABLE (i.e., this data set MAY NOT have been archived). 'xxxxxx' will contain the data set name of the active log in question.

System action

The program will remove this active log data set from the BSDS and continue.

System programmer response

Check to see if this data set had been archived. The active log data set was not deleted on disk but removed only from the BSDS data set, so it may still be archived, if needed. Use access method service routines to copy the VSAM active log data set to a sequential archive log data set.

DSNJ424I *csect-name* INVALID CONTROL STATEMENT. THE SECOND WORD MUST BE 'DDNAME' OR '*' OR MUST START WITH A PARENTHESIS.

Explanation

The control statement is invalid.

System action

The control statement is ignored. Db2 uses the SYSUT1 DD statement to locate the BSDS to be mapped. If the SYSUT1 DD statement is not available, the utility terminates.

User response

Correct or remove the control statement and rerun the job.

Problem determination

If you suspect an error in Db2, you might need to report the problem. For information about identifying

and reporting the problem, see Collecting diagnostic data (Collecting data).

Collect the following diagnostic items:

- SYSPRINT output, including JCL, for the application program or batch job, and system messages that were issued. Make sure that MSGLEVEL=(1,1) on the JOB statement so that all diagnostic information is sent to SYSPRINT.

Related reference

DSNJU004 (print log map) (Db2 Utilities)

Sample DSNJU004 control statement (Db2 Utilities)

DSNJ425I **INVALID *xxxxxx* VALUE/FORMAT FOR *yyyyyyyy* PARAMETER (YYYYDDDHHMMSST)**

Explanation

'xxxxxx' is the field in the 'yyyyyyyy' parameter that contains an incorrect value or incorrect format.

System action

The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.

User response

Correct the control statement and rerun the utility.

DSNJ426I **ENDTIME VALUE CANNOT BE LESS THAN STARTIME VALUE**

Explanation

The 'STARTIME' and 'ENDTIME' parameters specify a time range. Hence, the ENDTIME value must be equal to or greater than STARTIME value.

System action

The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.

User response

Correct the control statement and rerun the utility.

DSNJ427I **CHECKPOINT RECORD ADDED TO QUEUE**

Explanation

The checkpoint record specified has been added to the checkpoint queue.

System action

The BSDS checkpoint queue is modified as stated. This message is written to the SYSPRINT data set, not to a console.

DSNJ428I **CHECKPOINT RECORD DELETED FROM QUEUE, STARTRBA=*startrba*, ENDRBA=*endrba***

Explanation

The checkpoint record specified has been deleted from the Checkpoint Queue. 'startrba' and 'endrba' was the RBA range indicated in the deleted checkpoint record.

System action

The BSDS checkpoint queue is modified as stated. This message is written to the SYSPRINT data set, not to a console.

DSNJ429I **RBA RANGE CONFLICTS WITH EXISTING CHECKPOINT RECORD RBA RANGE**

Explanation

The specified RBA range for the new checkpoint record either exists or overlaps an existing RBA range in the checkpoint queue.

System action

The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.

User response

Run the print log map (DSNJU004) utility against the SYSUT1 BSDS and SYSUT2 BSDS. Determine the correct RBA range and correct the STARTRBA and ENDRBA parameters and rerun the utility.

DSNJ430I **SPECIFIED ENTRY CANNOT BE ADDED WITHOUT OVERLAYING EXISTING LOWEST ENTRY**

Explanation

The specified RBA range for the new checkpoint record is less than the existing lowest entry. The checkpoint queue is currently full and cannot add the new entry without overlaying the lowest entry.

System action

The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.

User response

Run the print log map (DSNJU004) utility against the SYSUT1 BSDS and SYSUT2 BSDS. Determine the lowest existing entry and either change the STARTRBA and ENDRBA parameters or delete the existing lowest entry and add the new low checkpoint entry and rerun the utility.

DSNJ431I STARTRBA SPECIFIED NOT FOUND IN CHECKPOINT QUEUE

Explanation

The specified STARTRBA could not be located in the checkpoint queue.

System action

The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.

User response

Run the print log map (DSNJU004) utility against the SYSUT1 BSDS and SYSUT2 BSDS. Determine the correct STARTRBA value and correct the STARTRBA parameter and rerun the utility.

DSNJ432I THE OFFLRBA VALUE MUST END WITH 'FFF'

Explanation

The OFFLRBA value is invalid. It must end with 'FFF'.

System action

The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.

User response

Correct the control statement and rerun the utility.

DSNJ433I *csect-name* INVALID CONTROL STATEMENT. A MEMBER LIST MUST CONTAIN AT LEAST ONE MEMBER NAME.

Explanation

The control statement is invalid. The member list is either empty or in the wrong format.

System action

The control statement is ignored. Db2 uses the SYSUT1 DD statement to locate the BSDS to be mapped. If the SYSUT1 DD statement is not available, the utility terminates.

User response

Correct or remove the control statement and rerun the job.

Problem determination

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Collect the following diagnostic items:

- SYSPRINT output, including JCL, for the application program or batch job, and system messages that were issued. Make sure that MSGLEVEL=(1,1) on the JOB statement so that all diagnostic information is sent to SYSPRINT.

Related reference

DSNJU004 (print log map) (Db2 Utilities)

Sample DSNJU004 control statement (Db2 Utilities)

DSNJ434I *csect-name* SYSIN MUST CONTAIN AT LEAST ONE RECORD.

Explanation

A SYSIN DD statement was provided, but the data set was null, or the JCL statement "//SYSIN DD *" was immediately followed by the statement "/*".

System action

The error is ignored. Db2 uses the DD SYSUT1 statement to locate the BSDS to be mapped. If the SYSUT1 DD statement is not available, the utility terminates.

User response

Correct or remove the control statement and rerun the job.

Problem determination

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Collect the following diagnostic items:

- SYSPRINT output, including JCL, for the application program or batch job, and system messages that were issued. Make sure that MSGLEVEL=(1,1) on the JOB statement so that all diagnostic information is sent to SYSPRINT.

Related reference

DSNJU004 (print log map) (Db2 Utilities)

Sample DSNJU004 control statement (Db2 Utilities)

DSNJ435I ***csect-name*** **THE MEMBER LIST OF A CONTROL STATEMENT MUST BE TERMINATED WITH A PARENTHESIS.**

Explanation

The control statement contained the correct format for starting a list of members, but the terminating parenthesis was not found.

System action

The control statement is accepted with an assumed parenthesis after the last member name recognized, and processing continues.

User response

Correct or remove the control statement and rerun the job.

Problem determination

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Collect the following diagnostic items:

- SYSPRINT output, including JCL, for the application program or batch job, and system messages that were issued. Make sure that MSGLEVEL=(1,1) on the JOB statement so that all diagnostic information is sent to SYSPRINT.

Related reference

DSNJU004 (print log map) (Db2 Utilities)

Sample DSNJU004 control statement (Db2 Utilities)

DSNJ436I ***csect-name*** **THE DD STATEMENT FOR *ddname* IS MISSING.**

Explanation

The print log map (DSNJU004) utility requested information about the identified *ddname* from the MVS Dynamic Allocation facility, but the DD statement was not found in the job.

System action

The job is terminated.

User response

Correct the JCL and rerun the job.

Problem determination

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Collect the following diagnostic items:

- SYSPRINT output, including JCL, for the application program or batch job, and system messages that were issued. Make sure that MSGLEVEL=(1,1) on the JOB statement so that all diagnostic information is sent to SYSPRINT.

Related tasks

Invoking stand-alone utilities (Db2 Utilities)

Related reference

DSNJU004 (print log map) (Db2 Utilities)

DSNJ437I ***csect-name*** **UNABLE TO ALLOCATE BSDS *dsname*. SVC 99 RTN CODE *rc*, RSN CODE *rsncd*, INFO *infocd*.**

Explanation

The print log map (DSNJU004) utility attempted to allocate a BSDS data set by using the z/OS Dynamic Allocation facility, but the system was unable to complete the allocation.

csect-name
The name of the control section that issued the message.

dsname
The data set name.

rc
The return code from the z/OS DYNALLOC (SVC 99) service.

rsncd
The reason code from the z/OS DYNALLOC (SVC 99) service.

infocode
The information code from the z/OS DYNALLOC (SVC 99) service.

System action

The processing of the indicated BSDS data set stops. If this data set is the last (or only) BSDS data set to be processed by this job, the job is terminated.

User response

See the reason code information for DYNALLOC to determine the action to take. Correct the JCL and rerun the job.

Problem determination

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Collect the following diagnostic items:

- SYSPRINT output, including JCL, for the application program or batch job, and system messages that were issued. Make sure that MSGLEVEL=(1,1) on the JOB statement so that all diagnostic information is sent to SYSPRINT.

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Related tasks

Invoking stand-alone utilities (Db2 Utilities)

Related reference

DSNJU004 (print log map) (Db2 Utilities)

Interpreting DYNALLOC return codes (MVS Programming Authorized Assembler Services Reference)

DSNJ438I ***csect-name*** **THE** ***xxx*** **VALUE MUST END WITH** ***'yyy'***

Explanation

The STARTRBA or ENDRBA value specified on the NEWLOG statement is invalid. *'xxx'* is either STARTRBA or ENDRBA, depending on which parameter is invalid. If *'xxx'* equals STARTRBA, then *'yyy'* equals *'000'* and if *'xxx'* equals ENDRBA, then *'yyy'* equals *'FFF'*.

System action

The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.

User response

Correct the control statement and rerun the utility.

DSNJ439I ***csect_name*** **NEW FUNCTION MODE REQUIRED FOR** ***xxxxxx*** **OPERATION**

Explanation

An attempt was made to run a log utility requiring new-function mode while Db2 was in conversion mode or enabling-new-function mode. Db2 must be in new-function mode before the utility program can run successfully. *xxxxxx* is the name of the attempted operation requiring new-function mode.

System action

The program will terminate with no action taken.

System programmer response

Convert Db2 to new-function mode and retry the program.

DSNJ440I **BSDS HAS ALREADY BEEN CONVERTED, DDNAME=*dd-name***

Explanation

This message occurs when a BSDS conversion program detects that the BSDS data set that was specified by *dd-name* was already converted.

System action

If only SYSUT1 was specified, or both SYSUT1 and SYSUT2 data sets were already converted, the program terminates with no action taken. In the case where both are specified, but only SYSUT1 was previously converted, the program continues to process the conversion for SYSUT2.

System programmer response

No further action is necessary.

Related reference

DSNJCNVB (Db2 Utilities)

DSNJCNVT (Db2 Utilities)

DSNJ441I **INVALID BSDS CONVERSION, DDNAME=*dd-name***

Explanation

This message is issued when a program, attempting to access the BSDS data set, encounters an invalid BSDS. An invalid BSDS is the result of a failure during a prior attempt to run a conversion program.

dd-name
The DDNAME of the BSDS data set being accessed.

System action

The program terminates with no action taken.

System programmer response

The procedure for running the program includes making a copy of the BSDS before conversion. Restore the BSDS to the original pre-conversion copy, and try

the conversion again. After the conversion is successful, try the program that issued the error message again.

Related reference

DSNJCNVB (Db2 Utilities)

DSNJCNVT (Db2 Utilities)

DSNJ442I ***csect-name*** **RECEIVED ERROR STATUS** ***nnn*** **FROM** ***macro-name***

Explanation

Db2 encountered an error while issuing macro *macro-name*. Error status is the return code from the specified macro.

System action

The requested operation fails.

User response

If the error is from the CONVTOD macro, ensure that the ENDTIME timestamp value is valid and in the correct format.

DSNJ443I ***csect-name*** **ENDTIME LOG TRUNCATION POINT =** ***xxxxxxxxxxxx***

Explanation

The ENDTIME timestamp value results in a log truncation at LRSN or STCK value *xxxxxxxxxxxx*.

System action

Utility processing continues.

DSNJ444I ***csect-name*** **ENDTIME TIMESTAMP IS GREATER THAN THE CURRENT TIMESTAMP**

Explanation

The ENDTIME timestamp must be a system time-of-day clock timestamp for which there exists a log record with a timestamp that is greater than, or equal to, the specified timestamp value.

System action

The utility terminates.

User response

Specify an ENDTIME timestamp value that is valid for log truncation.

DSNJ445I ***action-type*** **REQUEST FAILED:** ***error-description***

Explanation

A DSNJU003 (change log inventory) utility operation failed.

action-type
The DSNJU003 operation: DELMBR or RSTMBR.

error-description
A description of the error that occurred:

System action:

CRESTART FAILED: SYSPITR LRSN MUST BE GREATER THAN ***minimum-value*** **OF LAST MEMBER DESTRUCTION**
An attempt was made to use a CRESTART statement to create a conditional restart record for system point in time recovery. However, the CRESTART statement specified a log truncation point LRSN that is before the most recent member destruction. The logs of the destroyed member are no longer available. The minimum LRSN value is indicated in the message as *minimum-value*.

User response: Specify an LRSN that is greater than the minimum value indicated in the message.

CRESTART FAILED: SYSPITRT TIMESTAMP MUST BE GREATER THAN ***minimum-value*** **OF LAST MEMBER DESTRUCTION**
An attempt was made to use a CRESTART statement to create a conditional restart record for system point in time recovery. However, the CRESTART statement specified a log truncation point time stamp that is before the most recent member destruction. The logs of the destroyed member are no longer available. The minimum time stamp value is indicated in the message as *minimum-value*.

User response: Specify a time stamp that is more recent than the minimum value indicated in the message.

DEACTIV ON A MEMBER ALREADY DEACTIVATED
DELMBR DEACTIV was requested for a member that has already completed deactivation processing.

DEACTIV ON A MEMBER ALREADY DESTROYED
DELMBR DEACTIV was requested for a member that has already completed destruction processing.

DEACTIV ON A MEMBER ALREADY MARKED FOR DEACTIVATION
DELMBR DEACTIV was requested for a member that has already been marked for deactivation, but the deactivation process has not yet completed.

System action: The state of the member is unchanged.

DEACTIV ON A MEMBER ALREADY MARKED FOR DESTRUCTION
DELMBR DEACTIV was requested for a member that has already been marked for destruction by a previous DESTROY request.

DEACTIV ON A NON-EXISTENT MEMBER IN NON-DATA SHARING
An attempt was made to deactivate a member from the BSDS of a non-data sharing Db2 subsystem. Deactivation is allowed in data sharing mode only.

User response: Verify the member ID.

DESTROY ON A MEMBER ALREADY DESTROYED
DELMBR DESTROY was requested for a member that has already completed destruction processing.

DESTROY ON A MEMBER ALREADY MARKED FOR DESTRUCTION
DELMBR DESTROY was requested for a member that has already been marked for destruction but the destruction process has not yet completed.

System action: The state of the member is unchanged.

DESTROY ON A NON-EXISTENT MEMBER IN NON-DATA SHARING
An attempt was made to destroy a member from the BSDS of a non-data sharing Db2 subsystem. Destruction is allowed in data sharing mode only.

User response: Verify the member ID.

INVALID AFTER A NON-DELMBR OR NON-RSTMBR OPERATION
A control statement other than DELMBR or RSTMBR preceded the current DELMBR or RSTMBR statement. The statement is not allowed if the BSDS being processed belongs to the target member. The DELMBR or RSTMBR statement is not processed.

User response: Restart the member that owns the BSDS so that previous changes to the BSDS can be processed.

INVALID AFTER DELMBR OR RSTMBR OPERATION
A control statement other than DELMBR or RSTMBR was issued for a data sharing group member that is queued for deletion. When DELMBR or RSTMBR is input to DSNJU003, no other operations are allowed if the BSDS that is being processed belongs to the target member.

System action: The other control statements are not processed. If the BSDS that belongs to the target member is marked as deactivated or destroyed by a previous invocation, no further updates to the BSDS are allowed. The exception is if the target member was deactivated and an RSTMBR operation is requested.

INVALID WITH HOST MEMBER IN DEACTIV/ DESTROY STATE
A control statement other than RSTMBR was issued for a data sharing group member that has been deactivated. When a data sharing group member has been deactivated, the only control statement that DSNJU003 accepts for that member's BSDS is RSTMBR. When a member is marked as destroyed in its own BSDS, DSNJU003 rejects all statements that would alter the BSDS contents.

MEMBER ALREADY DESTROYED
RSTMBR was requested for a member that was destroyed. RSTMBR can be used only when a member is deactivated or marked for deactivation.

MEMBER ALREADY MARKED FOR DESTRUCTION
RSTMBR was requested for a member that was marked for destruction but not yet completely destroyed. RSTMBR can be used only when a member is deactivated or marked for deactivation.

User response: If a backup copy of the BSDS is available from before DELMBR DESTROY was used, restore the backup.

MEMBER HAS NOT BEEN DEACTIVATED
Either RSTMBR or DELMBR DESTROY was requested for a member that is not deactivated or marked for deactivation. A DELMBR DESTROY can immediately follow a DELMBR DEACTIV for the same member ID, but a DELMBR DEACTIV is always required first.

User response: Either complete the deactivation process or use DELMBR DEACTIV followed by DELMBR DESTROY for the target member.

MEMBER HAS NOT BEEN QUIESCED
DELMBR was requested for a member that has not been quiesced or was active when the member that owns the BSDS was shut down. A member must be quiesced before a DELMBR command will be accepted.

User response: Quiesce the target member. To update the state of the target member, restart the member that owns the BSDS that DSNJU003 was running against.

NON-EXISTENT MEMBER IN NON-DATA SHARING
RSTMBR was requested for a nonexistent member and the BSDS indicates the member that owns the BSDS is not part of a data sharing group. In a non-data sharing environment, RSTMBR can be used only for a known member that has been marked for deactivation through the DELMBR DEACTIV statement.

User response: Indicate a different member number.

UTILITY TIMESTAMP GREATER THAN SYSTEM TIMESTAMP. MEMBER RESTART REQUIRED.
DELMBR was requested, but failed because an earlier change to the BSDS updated the utility time stamp. The member must be restarted before DELMBR can be used.

User response: Restart the member that owns the BSDS before using DELMBR DEACTIV.

VALID MEMBER ID IS 1 TO 32 DECIMAL
An invalid member ID was specified. The valid range is 1 to 32, inclusive.

User response: Specify a member ID between 1 and 32.

System action

The change log inventory utility terminates. Message DSNJ445I is written to the SYSPRINT data set.

Additional actions occur for some *error-description* values, and are described with the explanation of the value.

User response

Take the action indicated for the *error-description* value.

Related reference
DSNJU003 (change log inventory) (Db2 Utilities)

DSNJ446I *operation-type* SUCCESSFUL FOR MEMBER ID *member-id*, MEMBER NAME *member-name*

Explanation

The change log inventory utility (DSNJU003) successfully completed a DELMBR or RSTMBR request.

operation-type
The type of operation: DELMBR DEACTIV, DELMBR DESTROY, or RSTMBR

member-id
The ID number of the member that was the target of the request.

member-name
The name of the member that was the target of the request.

System action

Processing completes. Message DSNJ446I is written to the SYSPRINT data set.

User response

No action is required.

Related reference
DSNJU003 (change log inventory) (Db2 Utilities)

DSNJ447I KEYWORD *required-keyword* IS REQUIRED WHEN KEYWORD *specified-keyword* IS SPECIFIED

Explanation

A change log inventory utility (DSNJU003) control statement specified a keyword that requires an additional keyword that was not specified.

required-keyword
The name of the keyword that is required when *specified-keyword* is used.

specified-keyword
The name of the keyword that was specified. This keyword cannot be used without *required-keyword*.

System action

The statement is ignored. The utility terminates with RC=4. Message DSNJ447I is written to the SYSPRINT data set.

User response

Correct the syntax of the control statement, and resubmit the utility job.

Related reference

DSNJU003 (change log inventory) (Db2 Utilities)

DSNJ448I ERROR DURING BSDS CONVERSION. *error-condition*

Explanation

An error occurred during BSDS format conversion.

error-condition
Text that describes the error that occurred.

OUTPUT BSDS CI SIZE NOT CORRECT, DDNAME=*dd-name*
The CI size of the output BSDS should be 8192.

dd-name
The JCL DD name of the data set with the incorrect CI size. Delete and redefine the output BSDS.

***log-type* LOG DATA SET *dataset-name* HAS AN ASSOCIATED PASSWORD**
Db2 does not support active or archive log data sets with passwords defined.

log-type
Indicates whether an active log or archive log data set has a password.

dataset-name
The name of the data set with the password.

INPUT BSDS NOT IN CORRECT FORMAT, DDNAME=*dd-name*

dd-name
Specifies the data set that was not in the format that supports 93 active logs and 10,000 archive logs. If you have not yet run DSNJCNVB against the BSDS, run DSNJCNVB first and then run DSNJCNVT.

INPUT AND OUTPUT BSDS ARE THE SAME. INPUT=*input-name*, OUTPUT=*output-name*
The converted BSDS cannot be the same as the BSDS to be converted.

input-name
The JCL input name of the data set.

output-name
The JCL output name of the data set.

UNRECOGNIZED BSDS RECORD, KEY=*key-value*
During conversion of the BSDS, a record was found that is not a known format.

key-value
The VSAM KSDS key of the BSDS record that was not recognized. To determine the operation that inserted the record into the BSDS, use IDCAMS PRINT and specify this key value. If the record is not needed, delete it and rerun the BSDS conversion

RETURN CODE *return-code*, REASON CODE *reason-code*
An error condition was found. For more information, see the reason code explanation.

System action

The program terminates. The output BSDS is not usable. The input BSDS is unaltered.

Programmer response:
Correct the error condition and rerun the conversion program.

Related reference

DSNJCNVT (Db2 Utilities)

DSNJ700I *csect_name* ERROR ATTEMPTING TO ACCESS BSDS FOR *member-type* MEMBER ID= *member-id*, MEMBER NAME= *member-name*, REASON-CODE= *reason-code*.

Explanation

Db2 issues this message to identify the peer or proxy member ID, and if known, the peer or proxy member name that are associated with the listed Db2 reason code.

member-type
One of the following values:

PEER
The BSDS is for a member of the same data sharing group.

PROXY
The BSDS is for a member of a proxy data sharing group in a GDPS Continuous Availability with zero data loss environment.

member-id
The IRLM member identifier for the member of the data sharing group.

member-name
The member name of the Db2 data sharing member that is not in this data sharing group.

reason-code
The Db2 reason code value that indicates the reason for the failure. For explanations of reason codes, see Db2 reason codes (Db2 Codes).

System action

An execution unit issues this message and then, if this was an unconditional request, writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates.

Operator response

Collect all relevant diagnostic materials, including SYS1.LOGREC, SVC dump, and console output of peer and host.

System programmer response

Review the explanation for the associated Db2 reason code for further action.

DSNJ701E ***csect-name*** **MEMBER NAME (*membername*) IN BSDS DOES NOT MATCH MEMBER NAME (*membername*) IN DB2 SYSTEM PARAMETERS *dsnzparm***

Explanation

During startup, Db2 detected that the member name listed in its bootstrap data set (BSDS) does not match the member name in the Db2 system parameters load module.

Operator response

Notify the system programmer.

System programmer response

Restore the BSDS or specify a different system parameters load module on the START DB2 command.

DSNJ702E ***csect_name*** **GENERIC LU NAME *lu-name* IN BSDS DOES NOT MATCH THE GENERIC LU NAME *lu-name* ASSOCIATED WITH THE DATA SHARING GROUP.**

Explanation

Db2 issues this message during startup when it detects that the generic LU name in the bootstrap data set (BSDS) does not match the generic LU name in the shared communications area (SCA) structure.

System action

Db2 startup continues.

This message is non-scrollable. It remains highlighted on the console until you take the appropriate action.

Operator response

Notify the system programmer.

System programmer response

Depending on the accuracy of the BSDS value, take one of the following actions:

- BSDS value is correct: Db2 startup will automatically replace the generic LU name in the SCA with the correct value. The BSDS for each member of this Db2 data sharing group must specify this same value for generic LU name.If any member specifies a different value for generic LU name, use the change log inventory utility (DSNJU003) to change the generic LU name.
- BSDS value is not correct: Db2 startup will replace the generic LU name in the SCA. The SCA value will be incorrect when startup is complete. Take the following actions to correct this situation:
  - Stop this Db2 subsystem.
  - Use the change log inventory utility (DSNJU003) to change the generic LU name of this member.
  - Issue START DB2 for this member. START DB2 will correct the generic LU name contained in the SCA.

Related reference

DSNJU003 (change log inventory) (Db2 Utilities)

DSNJ703E ***csect-name*** **GROUP NAME (*groupname*) IN BSDS DOES NOT MATCH GROUP NAME (*groupname*) IN DB2 SYSTEM PARAMETERS *dsnzparm***

Explanation

During startup, Db2 detected that the group name listed in its bootstrap data set (BSDS) does not match the group name in the Db2 system parameters load module.

Operator response

Notify the system programmer.

System programmer response

Restore the BSDS or specify a different system parameters load module on the START DB2 command.

DSNJ704I ***csect-name*** **NEW MEMBER(*member-name*) START-UP NOT ALLOWED WHEN GROUP-RESTART IS REQUIRED FOR GROUP(*group-name*).**

Explanation

One of the following occurred:

- A new member *member-name* tried to start when a group restart of data sharing group *group-name* is required.
- A member other than the originating member of a data sharing group attempted to start the new Db2 data sharing group. The originating member of a group is either an existing Db2 subsystem which formed the data sharing group or a new Db2 subsystem which was installed to form the group.

System action

The Db2 subsystem stops.

Operator response

Start a previously active member of this group. When the required group restart is completed, start the new member again.

If this is the very first startup of the group, you must start the originating member first before starting any other member.

DSNJ705I ***csect-name*** **THE DB2 SYSTEM PARAMETERS SPECIFY DATA SHARING, BUT THE BSDS SPECIFIES NON-DATA SHARING.**

Explanation

The system parameters passed on the Db2 start command specified data sharing, but the bootstrap data set (BSDS) did not indicate this Db2 is a data sharing member.

System action

The Db2 subsystem stops.

Operator response

If this Db2 should be a member of a data sharing group, inform the system programmer. If this Db2 is not a member of a data sharing group, restart Db2 with the correct system parameters load module

System programmer response

If this Db2 should be a member of a data sharing group, execute the installation job DSNTIJUZ, which updates the BSDS for data sharing.

If this Db2 is not a member of a data sharing group, reassemble the system parameters load module and specify DSHARE=NO.

If this Db2 is attempting to disable the data sharing group, then reassemble the system parameters load module and specify DSHARE=NO, then execute the installation job DSNTIJGF, and then restart this Db2. Job DSNTIJGF must be used with caution, this will disable the data sharing group.

Related tasks

Disabling data sharing (Db2 Installation and Migration)

Migration step 11: Define Db2 initialization parameters: DSNTIJUZ (Db2 Installation and Migration)

Installation step 5: Define Db2 initialization parameters: DSNTIJUZ (Db2 Installation and Migration)

Related reference

DATA SHARING field (DSHARE subsystem parameter) (Db2 Installation and Migration)

DSNJ706I ***csect-name*** **THE DB2 SYSTEM PARAMETERS SPECIFY NON-DATA SHARING, BUT THE BSDS SPECIFIES DATA SHARING.**

Explanation

The system parameters passed on the DB2 START command specified non-data sharing, but the bootstrap data set (BSDS) indicates this is a data sharing member.

System action

The Db2 subsystem stops.

Operator response

If this Db2 is a member of a data sharing group, restart Db2 with the correct system parameters load module. If this Db2 is not a member of a data sharing group, inform the system programmer.

System programmer response

If this Db2 should be a member of a data sharing group, reassemble the system parameters load module and specify DSHARE=YES. If this Db2 is not a member of a data sharing group, execute the installation job DSNTIJGF, which updates the BSDS for non-data sharing.

DSNJ707E ***csect_name*** **LOCATION NAME** ***location-name*** **IN BSDS DOES NOT MATCH THE LOCATION NAME** ***location-name*** **ASSOCIATED WITH THE DATA SHARING GROUP.**

Explanation

Db2 issues this message during startup when it detects that the LOCATION name in the bootstrap data set (BSDS) does not match the LOCATION name in the system communications area (SCA) structure.

System action

Db2 startup continues.

This message is non-scrollable. It remains highlighted on the console until you take the appropriate action.

Operator response

Notify the system programmer.

System programmer response

Depending on the accuracy of the BSDS value, take one of the following actions:

- BSDS value is correct: Db2 startup will automatically replace the LOCATION name in the SCA with the correct value. The BSDS for each member of this Db2 data sharing group must specify this same value for LOCATION. If any member specifies a different value for LOCATION, use the change log inventory utility (DSNJU003) to change the LOCATION name.
- BSDS value is not correct: Db2 startup will replace the LOCATION name in the SCA. The SCA value will be incorrect when startup is complete. Take the following actions to correct this situation:
  - Stop this Db2 subsystem.
  - If any member specifies a different value for LOCATION, use the change log inventory utility (DSNJU003) to change the LOCATION name.
  - Issue START DB2 for this member. START DB2 will correct the LOCATION name contained in the SCA.

Related concepts

Update the BSDS with the DSNJU003 utility (Db2 Data Sharing Planning and Administration)

Related reference

DSNJU003 (change log inventory) (Db2 Utilities)

DSNJ708I ***csect-name*** **NEW MEMBER START-UP IS NOT ALLOWED WHEN THE DATA SHARING GROUP IS IN SYSTEM RECOVER PENDING MODE**

Explanation

A new data sharing member attempted to join the data sharing group when the data sharing group is in System Recover Pending mode.

System action

Db2 startup terminates.

Operator response

When the data sharing group is no longer in System Recover Pending mode, start the new member again.

DSNJ709I ***csect-name RBA/LRSN value*** **WILL BE NEAR THE END OF THE LOG RANGE. REPLY Y TO CONTINUE, N TO CANCEL**

Explanation

This message is issued during enable, disable, or re-enable of data sharing mode if the resulting RBA or LRSN value is close enough to the end of the log range that normal SQL processing is not allowed.

csect-name
The name of the control section that issued the message.

RBA/LRSN
If you are disabling data sharing, the string RBA is displayed. Otherwise, the string LRSN is displayed.

value
The value of the RBA or LRSN if the operation continues.

System action

If Y is entered, the operation proceeds. If N is entered, the restart is terminated.

Operator response

Consult with the system programmer or database administrator to determine the correct reply.

System programmer response

Determine whether the RBA or LRSN value is acceptable. When the RBA or LRSN log is nearing the end of the RBA or LRSN range, normal SQL updates fail with resource unavailable errors for objects that are in basic 6-byte format. Convert database objects to extended 10-byte format before the end of the log range is reached.

DSNJ711E ***csect-name*** **SCA OPEN FAILURE ENCOUNTERED.**

Explanation

A failure occurred during command processing in an attempt to open an object in the SCA.

System action

Command processing terminates unsuccessfully.

System programmer response

Obtain SYS1.LOGREC and possible SVC dump for analysis.

Problem determination

Review the Db2 system console for possible DSN7xxxx and/or SVC dump messages that could relate to this problem.

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

DSNJ712E ***csect-name*** **SCA READ FAILURE ENCOUNTERED.**

Explanation

A failure occurred during command processing attempting to read from the SCA.

System action

Command processing terminates unsuccessfully.

System programmer response

Obtain SYS1.LOGREC and possible SVC dump for analysis.

Problem determination

Review the Db2 system console for possible DSN7xxxx and/or SVC dump messages that could relate to this problem.

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

DSNJ713E ***csect-name*** **SCA WRITE FAILURE ENCOUNTERED.**

Explanation

A failure occurred during command processing attempting to write to the SCA.

System action

Command processing terminates unsuccessfully.

System programmer response

Obtain SYS1.LOGREC and possible SVC dump for analysis.

Problem determination

Review the Db2 system console for possible DSN7xxxx and/or SVC dump messages that could relate to this problem.

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

DSNJ990I ***csect-name*** **SHOWCB ERROR, DDNAME =** ***dd-name*** **RETURN CODE =** ***error-code*** **REASON CODE =** ***reason-code***

Explanation

The VSAM macro SHOWCB failed when it was processing the specified data set.

csect-name
The name of the control section that issued the message.

error-code
The error code. A value of 4 means that the log data set was allocated as greater than 4 GB in size, which is not supported.

reason-code
The reason code.

dd-name
The DD name for the data set that SHOWCB was processing when it failed.

System action

Processing terminates.

System programmer response

See the information about macro return and reason codes for SHOWCB at Control block manipulation macro return and reason codes (z/OS DFSMStvs Administration Guide).

If the log data set was allocated as greater than 4 GB in size, reallocate the data set to be less than 4 GB in size.

User response

Notify the system programmer.

Severity

8 (error)

Related reference

VSAM macro descriptions and examples (DFSMS Macro Instructions for Data Sets)

DSNJ991I ***csect-name*** **START OF LOG DATA SET PREFORMAT FOR JOB** ***job-name step-name***

Explanation

The active log data set preformat utility has started.

Severity

0 (informational)

DSNJ992I ***csect-name*** **DDNAME =** ***dd-name*** **LOG DATA SET NAME =** ***data-set-name***

Explanation

The indicated *data-set-name* is to be preformatted.

The DDNAME *dd-name* was used to process the data set. This message is issued multiple times if multiple active log data sets are being preformatted.

Severity

0 (informational)

DSNJ993I ***csect-name*** **LOG DATA SET IS NOT A VSAM DATA SET**

Explanation

The input log data set is not a VSAM data set.

System action

Processing terminates.

User response

Use the AMS IDCAMS Service to define the active log data set as a VSAM Linear data set.

Severity

8 (error)

DSNJ994I ***csect-name*** **VSAM OPEN ERROR, DDNAME =** ***dd-name*** **ACBERRFLG =** ***error-code***

Explanation

VSAM OPEN failed with the indicated ACB *error-code* for the indicated *dd-name*.

System action

Processing terminates if the error code is greater than or equal to 128; otherwise, processing continues normally.

System programmer response

Follow standard VSAM diagnostic procedure. Refer to *z/OS DFSMS: Macro Instructions for Data Sets*. See also *MVS/DFP V3R3 Diagnosis Guide* for more information about the VSAM procedures.

User response

Notify the system programmer.

Severity

8 (error) if error is greater than or equal to 128; otherwise, 4 (warning)

DSNJ995I ***csect-name*** **VSAM PUT ERROR, DDNAME =** ***dd-name*****, RPLERREG =** ***return-code*****, RPLERRCD =** ***reason-code***

Explanation

VSAM PUT failed with the indicated *return-code* and *reason-code* for the listed *dd-name*.

System action

Processing terminates.

System programmer response

Follow standard VSAM diagnostic procedure. Refer to *z/OS DFSMS: Macro Instructions for Data Sets*. See also *MVS/DFP V3R3 Diagnosis Guide* for more information about the VSAM procedures.

User response

Notify system programmer.

Severity

8 (error)

DSNJ996I ***csect-name*** **LOG PREFORMAT COMPLETED SUCCESSFULLY,*****nn*** **RECORDS FORMATTED FOR DDNAME** ***dd-name***

Explanation

The active log data set was preformatted successfully. *nn*records (or VSAM control intervals) were formatted for the indicated *dd-name*. Multiple messages are issued if multiple log data sets are being preformatted concurrently.

Severity

0 (informational)

DSNJ997I ***csect-name*** **LOG PREFORMAT TERMINATED**

Explanation

Preformatting of the active log data set did not complete successfully.

System action

Processing terminates.

User response

Examine other error messages associated with this job.

Severity

8 (error)

DSNJ998I ***csect-name*** **LOG DATA SET IS NOT EMPTY, DDNAME =** ***dd-name***

Explanation

The input log data set that is designated by *dd-name* is not an empty data set. The input data set must be empty to prevent the loss of actual log data.

System action

Processing terminates.

User response

Use the AMS IDCAMS Service to delete and redefine the active log data set or correct the input log data set name.

Severity

8 (error)

Chapter 9. DSNL messages

Message identifiers that begin with DSNL communicate information about the distributed data facility.

DSNL001I DDF IS ALREADY STARTED

Explanation

The distributed data facility (DDF) was already active when you issued -START DDF command.

System action

The issued command is not executed.

DSNL002I DDF IS ALREADY STOPPED

Explanation

The distributed data facility (DDF) had already been stopped when the -STOP DDF command was issued.

System action

The issued command is not executed.

DSNL003I DDF IS STARTING

Explanation

The distributed data facility (DDF) -START command is starting.

System action

Db2 begins processing the -START DDF command.

DSNL004I *csect-name* DDF START COMPLETE LOCATION *location-name* LU *network-name.luname* GENERICLU *network-name.generic-luname* DOMAIN *domain-name* TCPPORT *incoming-port* SECPORT *secure-port* RESPORT *resynch-port* IPNAME *ip-name* OPTIONS: PKGREL = *pkgrel-value*

Explanation

The distributed data facility (DDF) started.

csect-name
The name of the control section that issued the message.

location-name
The location of the Db2 subsystem.

network-name.luname
The fully qualified LU name for the Db2 subsystem.

The value '- NONE' indicates that the Db2 subsystem has not activated its SNA/APPC communications support.

network-name.generic-luname
The fully qualified VTAM generic LU name for the Db2 subsystem.

The value '-NONE' indicates that no VTAM generic LU name was defined to be used by the Db2 subsystem or that SNA was not activated.

domain-name

For non-data sharing systems, the member-specific domain name that maps to the member-specific IP address.

For data sharing systems, the group domain name that maps to the group IP address.

The domain name can be specified in the DNS or a local host file.

The value '-NONE' indicates that TCP/IP is not supported, TCP/IP initialization failed, or Db2 has been started in restricted access mode.

incoming-port
The TCP/IP port number that is used by this Db2 subsystem to accept incoming DRDA connection requests.

- A value of 0 indicates that TCP/IP is not supported. The BSDS DDF record is not configured with a PORT.
- A value of '-NONE' indicates that Db2 will not accept connections on this port. This condition can be caused by a value of 0 for the MAXDBAT subsystem parameter.

secure-port
The TCP/IP port number that is used by this Db2 subsystem to accept incoming secure DRDA connection requests.

A value of 0 indicates that the BSDS DDF record is not configured with a SECPORT.

resynch-port
The TCP/IP port number that is used by this Db2 subsystem to accept incoming two-phase commit resynchronization requests.

A value of 0 indicates that TCP/IP is not supported. The BSDS DDF record is not configured with a RESPORT.

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ip-name
The name given to this Db2 subsystem for use as the network ID portion of the unit of work identifier.

- A value of '-NONE' indicates that either the BSDS DDF record does not have a value for IPNAME
- Any other value indicates that DDF has activated TCP/IP communications support in such a way that the value of *network-name.luname* will be '-NONE'.

pkgrel-value
The current value of the DDF PKGREL processing option. Possible values are:

BNDOPT
When a connection which has used a high performance DBAT terminates, the high performance DBAT is also be deallocated.

BNDPOOL
DDF processing is the same as for the BNDOPT option, with the following exception. When a connection that was used for a high performance DBAT terminates, the high performance DBAT is pooled. The pooled DBAT can then be used by another connection that presents a request to the subsystem.

COMMIT
Packages are always allocated under RELEASE(COMMIT) rules regardless of their package RELEASE bind option value.

When an access thread has completed a unit of work, and the DBAT can be pooled, DDF pools the DBAT, makes an accounting record, deletes the current WLM enclave, and inactivates the connection. Pooled access threads release all package allocation locks.

If the CMTSTAT subsystem parameter is set to ACTIVE, then the message will always indicate that PKGREL IS SET TO COMMIT, regardless of the value specified on the command.

System action

The DDF start up process completed. However, it might fail for reasons specified by messages DSNL013I, DSNL015I, DSNL016I, DSNL017I, DSNL018I, DSNL019I, DSNL700I, or DSNL705I.

System programmer response

Use the recommended domain name to configure network definitions for TCP/IP requesters.

Related concepts
Distributed data facility (Introduction to Db2 for z/OS)

Related tasks
Starting DDF (Db2 Administration Guide)

Related reference
MAX REMOTE ACTIVE field (MAXDBAT subsystem parameter) (Db2 Installation and Migration)
RELEASE bind option (Db2 Commands)
-START DDF (Db2) (Db2 Commands)

DSNL005I DDF IS STOPPING

Explanation

The distributed data facility (DDF) -STOP command has been initiated.

System action

The -STOP DDF command is initiated.

DSNL006I DDF STOP COMPLETE

Explanation

The distributed data facility (DDF) -STOP command has completed.

System action

The DDF has stopped.

DSNL007I DDF IS ABNORMALLY TERMINATING

Explanation

Abnormal termination of the distributed data facility (DDF) has started.

System action

Abnormal termination of the DDF is starting.

DSNL008I DDF ABNORMAL TERMINATION COMPLETE

Explanation

Abnormal termination of the distributed data facility (DDF) has completed.

System action

The DDF has stopped.

DSNL009I INVALID DDF THREAD *logical-unit-of-work-id* SPECIFIED

Explanation

No distributed transaction with the specified 'logical-unit-of-work-id' exists.

System action

The specified thread is not canceled.

User response

Determine the correct 'logical-unit-of-work-id' of the distributed thread that is to be canceled and then reissue the command.

Problem determination

Determine the correct value. The -DISPLAY THREAD command can be used to display all distributed activity.

DSNL010I DDF THREAD *luw-id* HAS BEEN CANCELED

Explanation

The distributed data facility (DDF) thread with the specified logical unit of work ID was canceled.

luw-id
The logical unit of work ID.

In the following cases, more than one DDF thread might be canceled:

- If the logical unit of work ID is an LU network name and an LUW instance number, instead of an LUWID token, and an application accesses the same Db2 server by different access paths (for example, A->B->C and A->D->C). In this case, multiple threads with the same LUWID exist at the server (for example, C). If CANCEL DDF THREAD is issued at the server, specifying this LUWID, every thread at the server with the LUWID is canceled. This case occurs rarely.
- If the logical unit of work ID is an LUWID token, and multiple server threads have the same logical unit of work ID. This happens when threads are processing secondary connections in support of an application that uses package-based continuous block fetch. All server threads that are associated with the secondary connections are canceled.

System action

The specified thread is canceled.

DSNL011I VTAM STOPPING DDF

Explanation

The operator issued a HALT NET command to terminate VTAM.

System action

The distributed data facility (DDF) -STOP command is initiated.

DSNL012I VTAM TERMINATING DDF

Explanation

The operator issued a HALT NET QUICK command or a HALT NET CANCEL command, or VTAM is terminating abnormally. This message can be issued any time after -START DDF and occurs when VTAM is stopped, which can occur prior to DDF termination. This message is not issued when DDF terminates normally.

System action

Termination of the distributed data facility is initiated.

DSNL013I VTAM OPEN ACB FAILED ERROR=*error-code*

Explanation

VTAM returned a nonzero return code after Db2 invoked the OPEN ACB macro instruction during termination of the distributed data facility (DDF). VTAM return codes for OPEN error conditions are defined in *z/OS Communications Server SNA Programming*.

System action

Termination of the distributed data facility is initiated.

Operator response

Notify the system programmer.

System programmer response

Determine the cause of the OPEN ACB failure, correct the error, and issue the -START DDF command.

Problem determination

For relevant diagnostic information, see OPEN macroinstruction error fields(z/OS Communications Server: IP and SNA Codes).

DSNL014I VTAM CLOSE ACB FAILED ERROR=*error-code*

Explanation

VTAM returned a nonzero return code after Db2 invoked the CLOSE ACB macro instruction during termination of the distributed data facility (DDF). VTAM return codes for CLOSE error conditions are

defined in *z/OS Communications Server SNA Programming*.

System action

Termination of DDF continues.

Operator response

Notify the system programmer.

System programmer response

Determine the cause of the failure, fix the error condition, and then issue the -START DDF command.

Problem determination

Refer to *z/OS Communications Server SNA Programming* for failure analysis during a CLOSE macro instruction.

DSNL015I VTAM SETLOGON FAILED RTNCD=*error-code* FDBK2=*open-flags*

Explanation

VTAM returned a nonzero return code after Db2 invoked the SETLOGON macro during initialization of the distributed data function (DDF). VTAM return codes are defined in *z/OS Communications Server SNA Programming*.

System action

Termination of the DDF is started.

Operator response

Notify the system programmer.

System programmer response

Refer to *z/OS Communications Server SNA Programming* to determine the cause of the failure. After the error is fixed, issue the -START DDF command.

DSNL016I DDF RECORD NOT FOUND IN BSDS

Explanation

DDF cannot find the DDF communication record in the BSDS.

System action

DDF termination process is initiated.

Operator response

Notify the system programmer.

System programmer response

Use the change log inventory to add the DDF communication record to the BSDS.

Problem determination

Collect the following diagnostic item:

- Print the contents of the BSDS using the print log map utility.

DSNL017I INVALID DDF RECORD FOUND IN BSDS REASON = *reason-code*

Explanation

An invalid or incomplete DDF communication record was found in the BSDS.

System action

DDF begins to terminate processing.

Operator response

Notify the system programmer.

System programmer response

See the information for the associated *reason-code*. Use the change log inventory utility to correct the DDF communication record in the BSDS.

Problem determination

Collect the following diagnostic item:

- Print the contents of the BSDS using the print log map utility.

DSNL018I VSAM ERROR READING DDF RECORD IN BSDS RPLERRCD=*error-code*

Explanation

A VSAM GET command was issued that resulted in a nonzero return code. RPLERRCD 'error-code' is the VSAM return code.

System action

Termination of the distributed data facility (DDF) is initiated.

Operator response

Notify the system programmer.

System programmer response

Determine the cause of the failure, fix the error condition, and issue the -START DDF command.

The cause of the failure is dictated by the VSAM return code. The BSDS may have to be recovered by using a backup copy.

Problem determination

Refer to the appropriate VSAM publications.

DSNL019I VTAM DOES NOT SUPPORT APPC FUNCTIONS

Explanation

The installed release of VTAM does not support the advanced program-to-program communications (APPC) application program interface (API). The APPC API bit is not set in the VTAM function-list vector in the access-method-support vector list.

System action

Termination of the distributed data facility (DDF) is initiated.

Operator response

Notify the system programmer.

System programmer response

Determine whether the installed release of VTAM supports the APPC API. If VTAM does not support the APPC API, a VTAM release that supports the APPC API must be installed before the DDF can be started.

DSNL020I KEYWORD 'THREAD' PARAMETER '*parameter*' FORMAT IN ERROR

Explanation

The parameter value specified for the logical unit of work ID on the CANCEL DDF THREAD has an invalid format.

parameter
The invalid parameter string.

The correct format for the parameter is either *network-id*.*luname*.*luwunique* or *luname*.*luwunique*, using the following values:

network-id
An optional 1- to 8-character network ID.

luname
A 1- to 8-character logical unit name.

luwunique
A 12-character hexadecimal number.

System action

The specified thread is not canceled.

User response

Determine the correct logical unit of work ID of the distributed thread that is to be canceled and reissue the command.

Problem determination

Use the -DISPLAY THREAD command to display all distributed activity.

DSNL021I *command* ACCEPTED

Explanation

The 'command' command has been accepted and asynchronous processing of 'command' has been initiated. The command can only be -START or -STOP the distributed data facility.

System action

The command was accepted and asynchronous processing has been initiated.

DSNL022I *csect-name* DDF THREAD '*luw-id*' WAS PREVIOUSLY CANCELED

Explanation

A command to cancel the distributed data facility (DDF) thread *luw-id* was issued, but a command to cancel the same thread has already been issued.

csect-name
The name of the control section that issued the message.

luw-id
The logical unit of work ID.

Either the CANCEL DDF THREAD or the CANCEL THREAD command was entered.

System action

The thread is currently being canceled.

User response

No action is required.

Programmer response

The CANCEL command terminates a thread only if the thread is processing in Db2 or is currently suspended by Db2. The thread might not be processing in Db2 in these situations:

- The thread is processing in the application and has not made a request to Db2. The DISPLAY THREAD command indicates this.
- The user placed the thread on an MVS resource using the ENQUE command. The CANCEL command has no effect on the thread until ENQUE completes and the thread returns to Db2.
- The thread is processing in VTAM and is waiting for a response from a partner. The DISPLAY THREAD DETAIL command indicates this. In this case the thread does not terminate until VTAM returns to Db2. VTAM commands, which will terminate the session or LU, can be used to cause VTAM to return to Db2.

DSNL023I DDF IS ALREADY IN THE PROCESS OF STARTING

Explanation

The distributed data facility (DDF) was starting when the -START DDF or -STOP DDF command was issued.

System action

The issued command is not executed.

DSNL024I DDF IS ALREADY IN THE PROCESS OF STOPPING

Explanation

The distributed data facility (DDF) was stopping when the -STOP DDF or -START DDF command was issued.

System action

The -START or -STOP DDF command is not executed.

DSNL025I A DISTRIBUTED AGENT FOR *luw-id=token* EXISTS AT THIS LOCATION BUT NOT AT SITE WITH LOCATION *location* AND LU *luname*

Explanation

The DDF error monitor has detected that a distributed agent exists at this location but not at the named partner location.

Where

luw-id=token
The logical unit of work ID of the thread followed by an '=' sign and a token which may be used in place of 'luw-id' in any Db2 command that accepts 'luw-id' as input.

location
The location name of the partner site where a thread with the same 'luw-id' does not exist.

luname
The 8-character LUNAME of the partner location.

Operator response

Determine if the inconsistency is due to network conditions or a Db2 error. If a Db2 error is suspected, acquire documentation to diagnose the problem.

1. Console dump of Db2 address spaces (*ssnm*DBM1, *ssnm*MSTR, *ssnm*DIST), VTAM, and user's address space at the requesting site.
2. Console dump of Db2 address spaces (*ssnm*DBM1, *ssnm*MSTR, *ssnm*DIST), and VTAM at the server site.
3. SYSLOG from requesting and server sites.
4. LOGREC from requesting and server sites.

If an indefinite inconsistency is suspected, use the CANCEL DDF THREAD command to terminate the thread. If CANCEL DDF THREAD fails to terminate the agent, use VTAM commands to terminate the thread conversations.

Problem determination

Use the Db2 DISPLAY THREAD command with DETAIL option at each Db2 subsystem to display information about the agent and its conversations. Use VTAM commands to display additional information about the conversations being used by the thread and also about network conditions.

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

.

DSNL026I LUW-ID *luw-id=token* APPEARS TO BE SUSPENDED PARTNER LOCATION *location* PARTNER LU *luname*

Explanation

The DDF error monitor has detected that a distributed agent with the specified 'luw-id' at this location and at the named partner 'location' may be suspended indefinitely.

Where

luw-id=token
The logical unit of work ID of the thread followed by an '=' sign and a token which may be used in place of 'luw-id' in any Db2 command that accepts 'luw-id' as input.

location
The location name of the partner site where a thread with the same 'luw-id' exists.

luname
The 8-character LUNAME of the partner location.

Operator response

Determine if the inconsistency is due to network conditions or a Db2 error. If a Db2 error is suspected, acquire documentation to diagnose the problem.

1. Console dump of Db2 address spaces (*ssnm*DBM1, *ssnm*MSTR, *ssnm*DIST), VTAM, and hung user's address space at the requesting site.
2. Console dump of Db2 address spaces (*ssnm*DBM1, *ssnm*MSTR, *ssnm*DIST), and VTAM as the server site.
3. SYSLOG from requesting and server sites.
4. LOGREC from requesting and server sites.

If an indefinite inconsistency is suspected, use the CANCEL DDF THREAD command to terminate the thread. If CANCEL DDF THREAD fails to terminate the agent, use VTAM commands to terminate the thread conversations.

Problem determination

Use the Db2 DISPLAY THREAD command with DETAIL option at each Db2 subsystem to display information about the agent and its conversations. Use VTAM commands to display additional information about the conversations being used by the thread and also about network conditions.

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

.

DSNL027I ***agent-type*** **DISTRIBUTED AGENT WITH LUW-ID** ***luw-id=token*** **THREAD-INFO** ***thread-information*** **RECEIVED ABEND=***abend-code* **REASON=***reason-code*

Explanation

A distributed agent has abended at this location.

agent-type
Information about the distributed agent that has abended:

REQUESTING
The thread is an allied thread that has distributed activity.

SERVER
The thread is a database access thread.

luw-id=token
The logical unit of work identifier (LUWID) and a five-digit token value. The *token* value can be used in any Db2 command that accepts a LUWID as input.

thread-information
Information about the thread. The information is presented in a colon-delimited list that contains the following segments:

- The primary authorization ID that is associated with the thread.
- The name of the user's workstation.
- The ID of the user.
- The name of the application.
- The statement type for the previously executed statement: dynamic or static.
- The statement identifier for the previously executed statement, if available. The statement identifier can be used to identify the particular SQL statement. For static statements, the statement identifier correlates to the STMT_ID column in the SYSIBM.SYSPACKSTMT table. For dynamic statements, the statement identifier correlates to the STMT_ID column in the DSN_STATEMENT_CACHE_TABLE table. That statement might not have contributed to the current failure.
- The name of the role that is associated with the thread.
- The correlation token that can be used to correlate work at the remote system with work performed at the Db2 subsystem. The

correlation token, if available, is enclosed in '<' and '>' characters, and contains three components, separated by periods:

- A 3 to 39 character IP address.
- A 1 to 8 character port address.
- A 12 character unique identifier.

An asterisk (*) in any segment indicates that the information is not available.

abend-code
The abend code. A value of zeros indicates that the abend code could not be determined.

reason-code
A numeric value that indicates the reason for the failure. A value of zeros indicates that the reason code could not be determined.

This message might be followed by instances of message DSNL028I, each of which describes a remote location where the distributed agent also exists and where diagnostic information might also need to be collected.

Problem determination

Use the information provided for the *abend-code* value to determine what diagnostic information to gather.

Look for instances of message DSNL028I that identify other locations that are involved in the abend.

Related concepts
Db2 reason codes (Db2 Codes)
Related information
DSNL028I
luw-id=token ACCESSING DATA *preposition* LOCATION *location nettype netvalue*

DSNL028I ***luw-id=token* ACCESSING DATA *preposition* LOCATION *location nettype netvalue***

Explanation

This message follows DSNL027I and identifies a remote location where work might have been occurring for the distributed thread. This message is informational and with the DSNL027I message identifies a remote location where diagnostic information might have to be collected.

luw-id=token
The logical unit-of-work ID of the thread followed by an '=' sign and a token which may be used in place of 'luw-id' in any Db2 command that accepts 'luw-id' as input.

preposition
'FOR' if the thread is a database access thread and 'AT' if the thread is an allied thread that has distributed activity.

location
This field contains one of the following:

- The requester's relational database name (location name)
- The requester's VTAM LU name (<luname>)
- The requester's IP address

nettype
Identifies the type of network used to access the remote site. There are two possible values:

LU --
indicates that VTAM is used to connect to the remote site.

IPADDR --
indicates that TCP/IP is used to connect to the remote site.

netvalue
The network address of the remote location. *netvalue* can be blank.

- If *nettype* is LU, *netvalue* specifies the VTAM LU name of the remote location.
- If *nettype* is IPADDR, *netvalue* specifies the IP address of the partner.

Problem determination

See message DSNL027I.

DSNL029I **DDF IS NOT INITIALIZED**

Explanation

A -START DDF or -STOP DDF command was issued before DDF was initialized during Db2 startup processing.

Operator response

Wait for the DSN9022I 'START DB2' NORMAL COMPLETION message and re-issue the command.

DSNL030I ***csect-name* DDF PROCESSING FAILURE FOR LUWID=*luw-id* REASON=*reason-code* THREAD-INFO=*thread-information***

Explanation

A requesting conversation was terminated because of DDF processing failure.

csect-name
The name of the control section that issued the message.

luw-id
The logical unit of work ID of the requesting agent, if that information is available, or a description of the logical unit that made the request in the format "*netid*.*luname*.000000000000".

reason-code
A numeric value that describes the nature of the DDF processing failure.

thread-information
Information about the thread. The information is presented in a colon-delimited list that contains the following segments:

- The primary authorization ID that is associated with the thread.
- The name of the user's workstation.
- The ID of the user.
- The name of the application.
- The statement type for the previously executed statement: dynamic or static.
- The statement identifier for the previously executed statement, if available. The statement identifier can be used to identify the particular SQL statement. For static statements, the statement identifier correlates to the STMT_ID column in the SYSIBM.SYSPACKSTMT table. For dynamic statements, the statement identifier correlates to the STMT_ID column in the DSN_STATEMENT_CACHE_TABLE table. That statement might not have contributed to the current failure.
- The name of the role that is associated with the thread.
- The correlation token that can be used to correlate work at the remote system with work performed at the Db2 subsystem. The correlation token, if available, is enclosed in '<' and '>' characters, and contains three components, separated by periods:
  - A 3 to 39 character IP address.
  - A 1 to 8 character port address.
  - A 12 character unique identifier.

  An asterisk (*) in any segment indicates that the information is not available.

System action

Processing continues, but the system will eventually abend the database access agent.

Operator response

Notify the system programmer for analysis.

System programmer response

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

DSNL031I ***csect-name*** **DRDA EXCEPTION CONDITION IN RESPONSE FROM SERVER LOCATION=*location-indicator* FOR THREAD WITH LUWID=*luwid* REASON=*reason-code* ERROR ID=*error-id* CORRELATION ID=*correlation-id* CONNECTION ID=*connection-id* IFCID=*ifcid* SEE TRACE RECORD WITH IFCID SEQUENCE NUMBER=*seq-no***

Explanation

A DRDA exception condition was detected in response data returned from the application server (AS). Possible error conditions include:

- An error reply message and severity code received from the server.
- A parsing error detected while processing a reply message or reply data object
- A DRDA protocol violation, (for example, an object returned that is not valid for this command).

csect-name
The name of the control section that issued the message.

luw-id
The logical unit of work (LUW) ID that identifies the thread. This values is also included in the trace record.

location-indicator
An indicator of the location:

- The server's relational database name

- The server's VTAM LU name
- The server's IP address

reason-code
The Db2 reason code for this specific error.

error id
The module name concatenated with a 4-byte source id that uniquely determines the source within the module where the exception is encountered.

correlation-id
The correlation identifier of the thread that detected the DRDA exception condition. Correlation IDs beginning with 001 through 028, inclusive, identify system agents.

connection-id
The connection name of the thread that detected the DRDA exception condition.

ifcid-number
The IFCID number of the trace record that was written.

sequence-number
The IFCID sequence number associated with the trace record. The trace record contains information that can be used to determine what caused the DRDA exception condition, and is written to the destination for IFCID 191. The message and the trace record are written only the first time an error is detected. This avoids flooding the console and the trace. The sequence number is printed in hexadecimal.

If the sequence number is zero, then the trace data was not externalized.

System action

An alert was generated. Additionally, if the *sequence-number* is not zero, the system wrote a trace record with IFCID=*ifcid-number* to the destination for IFCID 191 that can be used to diagnose the problem.

Problem determination

Determine the destination of the trace record and locate and print the trace record with SEQUENCE NUMBER=*sequence-number*. The description of the reason code can be used in conjunction with the publication Distributed Relational Database Architecture™ Reference to determine the type of DRDA exception that has been detected.

Related concepts

Db2 reason codes (Db2 Codes)

DSNL032I ***csect-name*** **DRDA EXCEPTION CONDITION IN REQUEST FROM REQUESTER LOCATION=*location-indicator* FOR THREAD WITH LUWID=*luw-id* REASON=*reason-code* ERROR ID=*error-id* IFCID=*ifcid-number* SEE TRACE RECORD WITH IFCID SEQUENCE NUMBER=*sequence-number***

Explanation

A DRDA exception condition was detected while processing a command or command data received from the application requester (AR). Possible error conditions include errors detected while processing a command or a command data object.

csect-name
The name of the control section that issued the message.

location-indicator
An indicator of the location:

- The requester's relational database name
- The requester's VTAM LU name
- The requester's IP address

luw-id
The logical unit of work (LUW) ID that identifies the thread. This value is also included in the trace record, or "NETID.LUNAME.000000000000" if the error detected involves an invalid FMH5.

reason-code
The Db2 reason code for this specific error.

error-id
The module name concatenated with a 4-byte source ID that uniquely determines the source within the module where the exception was encountered.

ifcid-number
The IFCID number of the trace record that was written.

sequence-number
The IFCID sequence number associated with the trace record. The trace record contains information that can be used to determine what caused the DRDA exception condition, and is written to the destination for IFCID 191. The message and the trace record are written only the first time an error is detected. This avoids flooding the console and the trace. The sequence number is printed in hexadecimal.

If the sequence number is zero, then the trace data was not externalized.

System action

An alert was generated. Additionally, if the *sequence-number* is not zero, the system wrote a trace record with IFCID=*ifcid-number* to the destination for IFCID 191 that can be used to diagnose the problem.

Operator response

Notify the system programmer for analysis.

System programmer response

Determine the destination of the trace record and locate and print the trace record with SEQUENCE NUMBER=*sequence-number*. The description of the reason code can be used in conjunction with the publication Distributed Relational Database Architecture Reference to determine the type of DRDA exception that has been detected.

Related concepts

Db2 reason codes (Db2 Codes)

DSNL033I ***csect-name*** **DDF TERMINATION SCHEDULED DUE TO DETECTION OF ABEND** ***abend*** **REASON** ***reason***

Explanation

A severe error was detected during DDF processing. DDF processing can no longer continue so DDF termination has been scheduled. 'Csect-name' is the Db2 module that detected the condition and requested DDF termination.

The abend and reason might also contain additional information about the cause.

abend
The abend code or zeros if no abend is associated with the termination of DDF.

If the abend was a Db2 04E abend, the Db2 reason code will contain additional information about the abend.

reason
The Db2 reason code or zeros if no Db2 reason code is associated with the termination of DDF.

If no abend is associated with the problem, the reason code describes the cause for the termination.

System action

Termination of the distributed data facility (DDF) is initiated.

Operator response

Notify the system programmer for analysis.

System programmer response

Determine the cause of the failure. Correct the condition and restart DDF using the -START DDF command.

Problem determination

If an abend is associated with the failure, a dump might have been provided. LOGREC will also contain information about the abend.

DSNL034E **DDF CANNOT BE STARTED BECAUSE OF BSDS INCONSISTENCIES, ORIGINAL LUNAME=*original-luname*, BSDS LUNAME=*bsds-luname*, ORIGINAL LOCATION=*original-location*, BSDS LOCATION=*bsds-location***

Explanation

The LUNAME or the LOCATION name stored in the bootstrap data set (BSDS) was changed after the distributed data facility (DDF) was last started, but DDF still has resynchronization responsibility with one or more partner logical units using the old LUNAME and LOCATION name. Both the original and current BSDS values of LUNAME and LOCATION name are displayed.

original-luname
The LUNAME required for resynchronization.

bsds-luname
The LUNAME currently stored in the BSDS.

original-location
The LOCATION name required for resynchronization.

bsds-location
The LOCATION name currently stored in the BSDS.

System action

DDF cannot be started until the inconsistencies are corrected.

Operator response

Inform the database administrator.

Database administrator response

Take the appropriate action, depending on whether there is a requirement to change the LUNAME or LOCATION name in the BSDS:

Name changed in error
Use the change log inventory (DSNJU003) utility to change the LUNAME, LOCATION name , or both back to the correct value. Then issue the START DDF command.

Name change required
Remove all of the resynchronization responsibility that Db2 had using the old names. You can purge this information, allow automatic resynchronization to take place, or use a combination of both.

You can purge resynchronization information by using the RESET INDOUBT command with the FORCE option. You can purge all information regardless of partner name (LOCATION (*)), or you can selectively purge by specifying a location name. DDF does not have to be started to use this command. You can use the DISPLAY THREAD command to generate a report of indoubt threads. This report indicates all resynchronization responsibility known by Db2.

If you do not purge the resynchronization information, or choose to selectively purge, and you want automatic resynchronization to occur before changing the names, you must first use the change log inventory (DSNJU003) utility to change the LUNAME, the LOCATION name, or both back to the correct value. Then issue the START DDF. At this point, automatic resynchronization begins. You can monitor the progress by periodically using the DISPLAY THREAD command for TYPE (INDOUBT) threads. Resynchronization does not complete until all needed communications paths are available and all needed partner logical units are available. If you cannot wait for availability, use the RESET INDOUBT command with the FORCE option to purge information associated with unavailable partners.

Related reference
-DISPLAY THREAD (Db2) (Db2 Commands)
-RESET INDOUBT (Db2) (Db2 Commands)
-START DDF (Db2) (Db2 Commands)
DSNJU003 (change log inventory) (Db2 Utilities)

DSNL035I DDF CANNOT BE STOPPED BECAUSE AN INDOUBT DATA BASE ACCESS THREAD EXISTS

Explanation

DDF is the connection manager for a database access thread (DBAT) that is indoubt. A STOP DDF MODE(QUIESCE) command is rejected until the indoubt logical unit of work is resolved.

System action

DDF is not stopped.

Operator response

Inform the database administrator.

Database Administrator Action: You have the following options:

- Wait for automatic resynchronization to be performed. When this occurs, either message DSNL407I or DSNL415I is displayed.

  After the indoubt thread is resolved, reissue the STOP DDF command.
- Use the DISPLAY THREAD TYPE(INDOUBT) command to find the LOCATION that has coordinator responsibility for the indoubt LUW. Contact that location and determine whether the LUW committed or aborted. Then use the RECOVER INDOUBT command to cause the indoubt DBAT to be resolved with the same decision.

  After the indoubt thread is resolved, reissue the STOP DDF command.
- Issue the STOP DDF MODE(FORCE) command. The indoubt thread remains indoubt and can be resolved by using automatic resynchronization after DDF is started again, or it can be resolved manually as described above.

DSNL036I DDF THREAD *logical-unit-of-work-id* SPECIFIED IS INDOUBT

Explanation

A database access thread that is indoubt cannot be canceled by using the -CANCEL DDF THREAD command.

System action

The specified thread is not canceled.

Operator response

Use the -DISPLAY THREAD TYPE(*) command to display all distributed activity.

DSNL037I *csect-name* RESET GENERICLU *lu* SUCCESSFUL

Explanation

The RESET GENERICLU command successfully purged the VTAM sysplex information from shared memory.

lu
The value supplied on the RESET GENERICLU command

System action

The VTAM information contained in the sysplex shared memory for the indicated LU is purged.

DSNL038E ***csect-name*** **RESET GENERICLU** ***lu*** **FAILED DUE TO VTAM RTNCD=*xx* and FDB2=*yy***

Explanation

The VTAM CHANGE,OPTCD=(SYN,ENDAFFIN) macro returned an unexpected return code, which is described by the indicated VTAM RTNCD and FDB2 values.

lu
The value supplied on the RESET GENERICLU command

xx
The hexadecimal value of the VTAM RTNCD field

yy
The hexadecimal value of the VTAM FDB2 field

System action

VTAM was not able to purge the sysplex shared memory information for the indicated LU.

System programmer response

Refer to *z/OS Communications Server SNA Programming* for the meaning of the VTAM RTNCD and FDB2 values.

DSNL039E ***csect-name*** **RESET GENERICLU** ***lu*** **FAILED DUE TO ACTIVE VTAM SESSIONS**

Explanation

The RESET GENERICLU command was not accepted because one or more active VTAM sessions exist to the indicated LU. All VTAM sessions must be terminated before the command is accepted.

lu
The value supplied on the RESET GENERICLU command

System action

The command is rejected.

System programmer response

Terminate the VTAM sessions to the remote LU and reissue the -RESET GENERICLU command.

DSNL040E ***csect-name*** **RESET GENERICLU** ***lu*** **FAILED DUE TO INDOUBT RESOLUTION INFORMATION**

Explanation

The RESET GENERICLU command was not accepted because information is currently being retained for resolution of indoubt threads for the indicated partner LU. The DISPLAY THREAD TYPE(INDOUBT) command can be used to view this information.

lu
The value supplied on the RESET GENERICLU command

System action

The command is rejected.

System programmer response

Make sure that all indoubt threads at the remote site are resolved before issuing the RESET GENERICLU command.

When Db2 performs automatic indoubt thread resolution, the information contained in the DISPLAY THREAD TYPE(INDOUBT) display is purged at the end of the resynchronization process.

If required, use the -RESET INDOUBT command to manually purge the indoubt resolution information.

DSNL041E ***csect-name*** **DB2 GENERIC LU NAME REQUESTED, BUT REQUIRED VTAM LEVEL IS NOT INSTALLED**

Explanation

The DB2 GENERIC LUNAME installation option was specified. This option requires VTAM Version 4 Release 2 or a later release.

System action

The DB2 GENERIC LUNAME installation option is ignored.

System programmer response

If the DB2 GENERIC LUNAME is required, install VTAM Version 4 Release 2 or a later release.

DSNL042E ***csect-name*** **DB2 SYSPLEX TP WAS INVOKED BY LU *lu*, BUT REQUIRED MVS LEVEL IS NOT INSTALLED**

Explanation

A request for the Db2 sysplex transaction program (TP) was received by a Db2 server that is a member of a data sharing group. The Db2 sysplex TP is used by the requesting systems to determine which Db2 systems within the group are currently available for DDF conversations.

The Db2 sysplex TP uses Workload Manager (WLM) functions in MVS Version 5 Release 2 or a later release to balance distributed workload among the Db2 systems in the group. Because the required MVS release is not installed or Db2 is not registered with WLM, the Db2 sysplex TP is not able to provide the requested information.

lu
The name of the LU in the network that invoked the Db2 sysplex TP

System action

The Db2 sysplex TP returns the NETID.LUNAME of the local Db2 system as the only available Db2 server in the group. The requester is not provided the names of other Db2 systems in the group, so all sessions from the requester are routed to the local Db2 server.

System programmer response

Install MVS Version 5 Release 2 or a later release if you want to have the Db2 sysplex TP return multiple NETID.LUNAME values to the requester or refer to the DSNL044I on why Db2 could not register with WLM.

DSNL043I ***csect-name*** **RESET GENERICLU '*luname*' INVALID**

Explanation

The *luname* value specified is invalid.

csect-name
The name of the control section that issued the message.

luname
The logical unit name.

The correct format for the logical unit name is either *luname* or *network-id.luname*, using the following values:

network-id
An optional 1- to 8-character network ID.

luname
A 1- to 8-character logical unit name.

System action

The parameter is ignored. Processing continues with the next logical unit name, if any.

User response

Determine the correct value for *luname* and reissue the command.

DSNL044I ***csect-name*** **MVS** ***macro-name*** **MACRO FAILED WITH RETCODE='*return-code*'X AND RSNCODE='*reason-code*'X**

Explanation

An MVS Workload Manager (WLM) macro returned an unexpected return code, which is described by the indicated RETCODE and RSNCODE values. DDF uses MVS Workload Manager macros to obtain data sharing sysplex routing information for incoming DDF work requests, and to establish an MVS enclave for the execution environment of the distributed thread.

csect-name
The name of the control section that issued the message.

macro-name
The name of the MVS macro that returned the unexpected return code. The possible values are:

- IWMSRSRG: Register with WLM for sysplex routing.
- IWMSRSRS: Request sysplex routing information.
- IWMSRDRS: Deregister with WLM for sysplex routing.
- IWMECREA: Create enclave.
- IWMEQRP: Query enclave

The WLM sysplex routing service macros will be appended with the contents of the LOCATION parameter passed to it. The contents of the LOCATION parameter will either be the member's location name or one of the alias-names being defined to subset the data sharing group. If the member's location name is displayed, then this member will not participate in WLM workload balancing. If a subsetting alias-name is displayed, then subsetting of the data sharing group by that alias-name will be disabled. However, a connection to this member of the data sharing group will be accepted when using the alias-name instead of the member's location name.

return-code
The hexadecimal value of the MVS return code.

reason-code
The hexadecimal value of the MVS reason code.

System action

If a sysplex routing macro failed, then sysplex routing may not be performed in which case, all SQL statements received from the client will be processed by this Db2 subsystem. If an enclave macro failed, the distributed thread may not be able to execute in an MVS enclave, however the distributed thread will continue to execute as an MVS SRB.

System programmer response

Use the MVS return and reason codes to determine the problem.

Related reference

Setting up a Service Definition (MVS Programming: Workload Management Services)

DSNL045I ***csect-name*** **ICSF** ***function-name*** **FUNCTION FAILED WITH RETCODE='*return-code*'X AND RSNCODE='*reason-code*'X**

Explanation

Db2 for z/OS made an Integrated Cryptographic Service Facility (ICSF) call because a connection to a remote server or a connection from a remote requester is using encryption. Db2 for z/OS uses ICSF to perform the following functions:

- Creating connection keys
- Generating a shared private key
- Encrypting data
- Decrypting data

The ICSF call returned an unexpected return code.

csect-name
The name of the control section that issued the message.

function-name
The name of the ICSF call that returned the unexpected return code. The possible values are:

- CSNERNG: Random Number Generate
- CSNECKM: Multiple Clear Key Import
- CSNFPKB: Key Token Build
- CSNFPKE: Key Encrypt
- CSNEENC: Encipher data.
- CSNEDEC: Decipher data
- CSNESYE: Symmetric Encipher
- CSNESYD: Symmetric Decipher
- CSNEOWH: MD5 Hash

return-code
The hexadecimal value of the ICSF return code.

reason-code
The hexadecimal value of the ICSF reason code.

System action

The encryption function cannot be processed. If ICSF services were successfully loaded during Db2 startup processing, Db2 retries the ICSF services call periodically. Each time that the call fails, Db2 issue this message. If ICSF services were not successfully loaded, Db2 does not retry the ICSF services call.

System programmer response

If the encryption facility is not installed, install it before requesting encryption. If the encryption facility is installed, verify that it is working correctly. Look up the return code and reason code in the ICSF documentation for help in finding and fixing the problem.

Related reference

z/OS Cryptographic Services Integrated Cryptographic Service Facility System Programmer's Guide

DSNL046I ***csect-name*** **ICSF is not enabled**

Explanation

This message indicates that a cryptographic service is required, but the Integrated Cryptographic Service Facility (ICSF) is unavailable.

System action

Db2 cannot continue with the encryption or decryption function.

System programmer response

If the cryptographic service facility is not installed, install it before requesting encryption functions. If it is configured, verify that the ICSF service is available and working correctly.

Related reference

z/OS Cryptographic Services Integrated Cryptographic Service Facility System Programmer's Guide

DSNL047I **THE REQUESTED TRUSTED CONNECTION CANNOT BE ESTABLISHED TO THE LOCATION** ***location-name***

Explanation

The trusted connection that you requested cannot be established to the location *location-name*.

System action

The attempt to create a trusted connection was unsuccessful. A normal connection was created without any attributes of a trusted context.

Problem determination

location-name identifies the name of the server that could not support the trusted connection.

DSNL048I ***csect-name* SAF USER MAPPING FUNCTION *function-name* FAILED WITH RETURN VALUE=*return-value* RETURN CODE=*return_code* REASON CODE=*reason_code* ERROR MESSAGE:*saf_error_message***

Explanation

The SAF user mapping plug-in function failed. When Db2 receives a user registry name from a remote client application, Db2 calls the SAF user mapping plug-in service to retrieve the z/OS user ID which will be used as the primary authorization ID for the remote connection.

function-name
The name of the SAF user mapping function that failed. Possible functions can be safMappingInit(), safMappingLookup(), or safMappingTerm().

return-value
SAF user mapping function return value.

return_code
SAF user mapping function return code.

reason_code
SAF user mapping function reason code.

saf_error_message
SAF user mapping function error message detailing the error condition.

System programmer response

Refer to the *z/OS Security Server* - RACF Messages and Codes for the meaning of SAF user mapping function *return_value*, *return_code*. *reason_code*, and *saf_error_message*.

DSNL065I ***csect-name* CURRENT DDF STATE DOES NOT PERMIT STOP DDF MODE(SUSPEND)**

Explanation

The current DDF state does not allow suspend processing to be initiated. DDF must be started for normal processing in order for suspend processing to be initiated.

System action

The command is not executed.

DSNL066I ***csect-name* STOP DDF MODE(SUSPEND) COMPLETE**

Explanation

DDF suspend processing has completed successfully. DDF has suspended all inbound activity.

System action

Processing continues normally.

DSNL067I ***csect-name* CURRENT DDF STATE DOES NOT PERMIT START DDF**

Explanation

The current DDF state does not allow START DDF processing to be initiated.

System action

The command is not executed.

DSNL068I ***csect-name* START DDF (RESUME PROCESSING) COMPLETE**

Explanation

DDF has resumed normal processing.

System action

Processing continues normally.

DSNL069I ***csect-name* DDF IS SUSPENDING**

Explanation

DDF has initiated suspend processing.

System action

Processing continues normally.

DSNL070I ***csect-name* DDF IS RESUMING**

Explanation

DDF has initiated resume processing.

System action

Processing continues normally.

DSNL071I ***csect-name*** **WAIT OR CANCEL REQUIRES KEYWORD SUSPEND**

Explanation

The WAIT(*n*) or CANCEL(*n*) keywords require that MODE(SUSPEND) be specified.

System action

The command is not executed.

User response

Add the missing keyword and reissue the command.

Related reference

-STOP DDF (Db2) (Db2 Commands)

DSNL072I ***csect-name*** **WAIT TIME EXPIRED, DDF RESUME PROCESSING INITIATED**

Explanation

The DDF suspend process has not completed successfully in the period of time specified for the WAIT keyword, so DDF resume processing has been initiated.

System action

DDF resume processing has been initiated.

Related reference

-STOP DDF (Db2) (Db2 Commands)

DSNL073I ***csect-name*** **CANCEL TIME EXPIRED, CANCEL ACTIVE DBAT PROCESSING HAS BEEN INITIATED**

Explanation

The DDF suspend process has not completed successfully in the period of time specified for the CANCEL keyword so DDF is canceling all active database access threads (DBATS).

System action

DDF is attempting to terminate all active database access threads.

Related reference

-STOP DDF (Db2) (Db2 Commands)

DSNL074I **NUMBER OF CLIENT CONNECTIONS HAS EXCEEDED** ***exceeded-percent*** **% OF THE MAXIMUM ALLOWED**

Explanation

The number of increasing client connections has exceeded either 80% or 90% relative of the value of the CONDBAT subsystem parameter.

percent-exceeded
The percentage of the threshold specified by the value of the CONDBAT subsystem parameter that was exceeded.

The DSNL074I message is issued only when the Db2 subsystem is a member of a data sharing group.

System action

The health value reported to WLM is decreased to 50% (when the value of *exceeded-percent* is 80) or 25% (when the value of *exceeded-percent* is 90) of the calculated Db2 system health value. This action might enable remote client systems to direct work to other members which have more resources to process the work.

The modified health value remains until the number of client connections decreases below either the 80% or 90% threshold.

System programmer response

If a subsequent DSNL075I is displayed, no action is required.

Otherwise, investigate why the number of connections has exceeded the threshold set by the CONDBAT subsystem parameter. You can use the DISPLAY LOCATION command to determine which client locations are sending increasing numbers of connections to the Db2 subsystem. If the cause of the increasing connections in normal workload growth, then additional monitoring might be required. If the increasing connections are the result of and exception condition, additional investigation might be required to resolve the problem.

Related reference

MAX REMOTE CONNECTED field (CONDBAT subsystem parameter) (Db2 Installation and Migration)

-DISPLAY LOCATION (Db2) (Db2 Commands)

Related information

DSNL075I

NUMBER OF CLIENT CONNECTIONS NO LONGER EXCEEDS *percent-exceeded*% OF THE MAXIMUM ALLOWED

DSNL075I NUMBER OF CLIENT CONNECTIONS NO LONGER EXCEEDS *percent-exceeded*% OF THE MAXIMUM ALLOWED

Explanation

The number of client connections has decreased such that either the 80% or 90% threshold relative to the MAX CONDBAT subsystem parameter is no longer being exceeded.

percent-exceeded
The percentage of the threshold specified by the value of the CONDBAT subsystem parameter that was exceeded.

The health value reported to WLM will also be increased to 50% (when the value of *percent-exceeded* is 90) or 100% (when the value of *percent-exceeded* is 80) of the calculated Db2 system health value.

The DSNL075I message can only be issued when the Db2 subsystem is a member of a data sharing group.

System action

Processing continues.

User response

No action is required.

Related reference
MAX REMOTE CONNECTED field (CONDBAT subsystem parameter) (Db2 Installation and Migration)

Related information
DSNL074I
NUMBER OF CLIENT CONNECTIONS HAS EXCEEDED *exceeded-percent* % OF THE MAXIMUM ALLOWED

DSNL080I *csect-name* DISPLAY DDF REPORT FOLLOWS:

Explanation

This message displays output from the DISPLAY DDF command. The output includes the status and configuration of DDF for the local subsystem or member. It also includes statistics for the connections and threads that are controlled by DDF.

csect-name
The name of the control section that issued the message.

The remaining output consists of one or more of the following messages, in the indicated order:

- DSNL081I: DDF status
- DSNL082I and DSNL083I: Location information
- DSNL084I: TCP/IP port information
- DSNL085I: IP address
- DSNL086I: TCP/IP domain name
- DSNL087I and DSNL088I: Aliases
- DSNL089I: Member IP address
- DSNL090I: Subsystem parameter information (CMTSTAT, CONDBAT, and MAXDBAT)
- DSNL091I: Subsystem parameter information (MAXCONQN and MAXCONQW)
- DSNL092I and DSNL093I: DBAT and connection information
- DSNL094I: Closed client connections
- DSNL096I: Detailed information for a specific alias
- DSNL100I, DSNL101I, DSNL102I: Server list information
- DSNL105I and DSNL106I: DDF options
- DSNL099I: End of output

DSNL081I: DDF status

The introduction to the output is followed by the operational status of DDF:

```
DSNL081I STATUS=status
```

status
The DDF status, which can be one of the following values:

STARTD
DDF is started.

STARTG
DDF is starting.

STOPDF
DDF was stopped abnormally, for example, by the STOP DDF command with the MODE(FORCE) option.

STOPDQ
DDF was stopped normally or is not yet started. DDF can be stopped normally by using the STOP DDF command with the MODE(QUIESCE) option.

STOPGF
DDF is in the process of stopping abnormally, for example, by the STOP DDF command with the MODE(FORCE) option.

STOPGQ
DDF is in the process of stopping normally, for example, by the STOP DDF command with the MODE(QUIESCE) option

SUSPND
DDF is suspended, for example, by the STOP DDF command with the MODE(SUSPEND) option.

SUSPNG
DDF is in the process of suspending, for example, by the STOP DDF command with the MODE(SUSPEND) option.

NOINIT
DDF is not configured. The value of the DDF subsystem parameter is NO.

Related information:

-STOP DDF (Db2) (Db2 Commands)
DDF STARTUP OPTION field (DDF subsystem parameter) (Db2 Installation and Migration)

DSNL082I and DSNL083I: Location information

The DDF status information is followed by location information:

```
DSNL082I LOCATION           LUNAME
GENERICLU
DSNL083I location           luname
genericlu
```

location
The location name of DDF, as recorded in the bootstrap data set (BSDS). The location name can be specified by one of the following methods:

- The Db2 LOCATION NAME field on the DSNTIPR installation panel
- The LOCATION option in the DDF statement of the DSNJU003 (change log inventory) utility

luname
The DDF LU name, as recorded in the BSDS. The LU name can be specified by one of the following methods:

- The Db2 NETWORK LUNAME field on the DSNTIPR installation panel
- The LUNAME option in the DDF statement of the DSNJU003 (change log inventory) utility

A value of -NONE indicates one of the following situations:

- An LU name is not configured.
- The DDF record in the BSDS already has a value for IPNAME. Therefore, DDF did not activate its Systems Network Architecture (SNA) or Advanced Program to Program Communication (APPC) support.

If an LU name is configured, the *luname* field contains the fully qualified LU name, which consists of a network ID, a period delimiter, and the LU name. The network ID is determined from VTAM after DDF is started. A network ID of NONE indicates that DDF is not yet started, or initialization with VTAM failed.

genericlu
The DDF generic LU name, as recorded in the BSDS. The generic LU name can be specified by one of the following methods:

- The Db2 GENERIC LUNAME field on the DSNTIPR installation panel
- The GENERIC option in the DDF statement of the DSNJU003 (change log inventory) utility

A value of -NONE indicates one of the following situations:

- A generic LU name is not configured.
- The DDF record in the BSDS already has a value for IPNAME. Therefore, DDF did not activate its Systems Network Architecture (SNA) or Advanced Program to Program Communication (APPC) support.

If a generic LU name is configured and enabled, the *genericlu* field contains the fully qualified generic LU name, which consists of a network ID, a period delimiter, and the generic LU name. The network ID is determined from VTAM after DDF is started. A network ID of NONE indicates that the DDF is not yet started, or initialization with VTAM failed.

The location name, LU name, and generic LU name for DDF are also included in message DSNL004I when DDF is started.

Related information:

DB2 LOCATION NAME field (Db2 Installation and Migration)
DB2 NETWORK LUNAME field (Db2 Installation and Migration)
DB2 GENERIC LUNAME field (Db2 Installation and Migration)
DSNJU003 (change log inventory) (Db2 Utilities)
“DSNL004I” on page 321

DSNL084I: TCP/IP port information

The location information is followed by information about the TCP/IP port that is associated with DDF:

```
DSNL084I TCPPORT=tcp-port SECPORT=secure-port
RESPORT=resync-port IPNAME=ip-name
```

tcp-port
The TCP/IP port number for the SQL listener, as recorded in the BSDS. This port number can be specified by one of the following methods:

- The DRDA PORT field on the DSNTIP5 installation panel
- The PORT option in the DDF statement of the DSNJU003 (change log inventory) utility

A value of 0 (zero) indicates that an SQL listener port was not specified, and DDF is not configured to use TCP/IP network protocols.

A value of -NONE indicates that Db2 does not accept connections on this port. One possible reason that Db2 does not accept connections is that the MAXDBAT subsystem parameter is set to 0 (zero). The current MAXDBAT value is listed in the DSNL090I message, which is included as part of the DISPLAY DDF output when the DETAIL option is specified.

secure-port
The TCP/IP port number for the secure SQL listener, as recorded in the BSDS. This port number can be specified by one of the following methods:

- The SECURE PORT field on the DSNTIP5 installation panel
- The SECPORT option in the DDF statement of the DSNJU003 (change log inventory) utility

A value of 0 (zero) indicates both of the following conditions:

- A secure SQL listener port was not specified.
- DDF is not configured to accept secure inbound connections by using the Secure Socket Layer (SSL) protocol through this port number.

If a secure port is not specified, remote connections can still use the TCP/IP port for the SQL listener (*tcp-port*) and use the SSL protocol on that port. However, DDF does not validate whether the connection uses SSL protocol.

A value of -NONE indicates that Db2 does not accept connections on this port. One possible reason that Db2 does not accept connections is that the MAXDBAT subsystem parameter is set to 0 (zero). The current MAXDBAT value is listed in the DSNL090I message, which is included as part of the DISPLAY DDF output when the DETAIL option is specified.

resync-port
The TCP/IP port number for the two-phase commit resynchronization (resync) listener, as recorded in the BSDS. This port number can be specified by one of the following methods:

- The RESYNC PORT field on the DSNTIP5 installation panel
- The RESPORT option in the DDF statement of the DSNJU003 (change log inventory) utility

A value of 0 (zero) indicates that a resynchronization listener port was not specified, and DDF is not configured to use TCP/IP network protocols.

ip-name
The IPNAME value, as recorded in the BSDS. For a description of the IPNAME value, see the DSNJU003 syntax information.

This value is unique to this DDF.

If this Db2 subsystem is a member of a data sharing group, the IPNAME value is unique to that data sharing group. If all the members of a data sharing group activate only their TCP/IP communications support, all members of that group must be defined with the same IPNAME value.

This TCP/IP port information for DDF is also included in message DSNL004I, which is displayed when DDF is started.

Related information:

DRDA PORT field (Db2 Installation and Migration)
SECURE PORT field (Db2 Installation and Migration)
RESYNC PORT field (Db2 Installation and Migration)
MAX REMOTE ACTIVE field (MAXDBAT subsystem parameter) (Db2 Installation and Migration)
“DSNL004I” on page 321
DSNJU003 (change log inventory) (Db2 Utilities)

DSNL085I: IP address

The TCP/IP port information is followed by the IP address that is associated with DDF:

```
DSNL085I IPADDR=ip-address
```

ip-address
The IP address of DDF.

If the subsystem is a member of a data-sharing group, the IP address is a sysplex-wide IP address. Db2 expects this sysplex-wide IP address to be

configured as a distributed dynamic virtual IP address (distributed DVIPA). A distributed DVIPA distributes connections across the group.

A value of -NONE indicates that one or more of the following conditions is true:

- DDF is not configured to use TCP/IP network protocols. See the *tcp-port* value in message DSNL084I.
- DDF is not started.
- TCP/IP initialization failed.

If both IPv4 and IPv6 addresses are configured, message DSNL085I is displayed twice, once for each protocol type.

If the subsystem is not a member of a data sharing group and the listener ports are defined, DDF obtains its IP address from one of the following places:

- The IP address that is recorded in the BSDS
- The information that is returned by a z/OS UNIX System Services getaddrinfo call

If the subsystem is a member of a data sharing group and the listener ports are defined, DDF obtains the location's sysplex-wide IP address from one of the following places:

- The IP address that is recorded in the BSDS
- The IP address that is bound in the TCP/IP PORT definition statement for the DRDA SQL port

If the IP address is recorded in the BSDS, DDF accepts connections on any address. Otherwise, DDF accepts connections on only the IP addresses that are displayed in messages DSNL085I and DSNL089I.

Related information:

Communicating with data sharing groups (Db2 Data Sharing Planning and Administration)
getaddrinfo (BPX1GAI, BPX4GAI) -- Get the IP address and information for a service name or location (z/OS UNIX System Services Programming: Assembler Callable Services Reference)
Starting TCP/IP support (Db2 Installation and Migration)

DSNL086I: TCP/IP domain name

The IP address is followed by the TCP/IP domain name that is associated with DDF:

```
DSNL086I domain-type DOMAIN=domain-name
```

domain-type
The type of domain name that is displayed, which can be one of the following values:

SQL
The name that is used by TCP/IP to route requests to the location. The name is associated with the IP address that is displayed in message DSNL085I.

RESYNC
The name that is used by TCP/IP to route requests to DDF. This information is displayed only if DDF is a member of a Db2 data sharing group. This name is associated with the IP address that is displayed in message DSNL089I.

domain-name
The domain name that is associated with the domain type. A value of -NONE indicates that TCP/IP is not configured or that TCP/IP initialization failed.

This domain information is also included in messages DSNL519I and DSNL004I.

Related information:

"DSNL519I" on page 389
"DSNL004I" on page 321
Communicating with data sharing groups (Db2 Data Sharing Planning and Administration)

DSNL087I and DSNL088I: Aliases

If aliases were defined for the DDF location by using the MODIFY DDF command or by using the DSNJU003 (change log inventory) utility, the output includes alias information:

```
DSNL087I ALIAS           PORT     SECPORT
STATUS
DSNL088I alias           port     secure-port
status
```

alias
An alias name.

You can manage static aliases by using the DSNJU003 (change log inventory) utility. You can manage dynamic aliases by using the MODIFY DDF command and specifying the ALIAS option.

port
The TCP/IP port that is associated with the alias. A value of blanks indicates that a port was not specified for the alias. However, the alias can still be accessed by using other active DRDA SQL ports.

This value is ignored for statically defined location aliases in non-data-sharing environments.

secure-port
The TCP/IP secure port that is associated with the alias. A value of blanks indicates that a secure port was not specified for the alias. However, the alias can still be accessed by using other active DRDA secure SQL ports.

This value is ignored for statically defined location aliases in non-data-sharing environments.

status
The operational status of the alias, which can be one the following values:

STARTG
The alias is starting. The MODIFY DDF command was issued with the ALIAS keyword to start the alias, and the start operation is in progress.

STARTD
The alias is started or ready to start with the alias port. Db2 might be processing existing connections to the alias and is accepting new connection requests to the alias by using the alias port. Otherwise, Db2 starts accepting new connection requests to the alias by using the alias port when the following conditions become true:

- DDF is started.
- The MAXDBAT subsystem parameter is set to a value greater than 0.

STOPG
The alias is stopping. The MODIFY DDF command with the ALIAS keyword was issued to stop an alias, and the stop operation is in progress.

STOPD
The alias is stopped. Db2 does not accept new connection requests to the alias by using the alias port. However, Db2 can still accept requests to the alias by using the group SQL port if DDF is active and listening on it. This value applies to only those aliases that are defined and managed dynamically by the MODIFY DDF command with the ALIAS keyword.

CANCLG
The alias is canceling. The MODIFY DDF command with the ALIAS keyword was issued to cancel an alias, and the cancel operation is in progress.

CANCLD
The alias is canceled. Db2 canceled all existing database access threads (DBATs) that were processing connections to the alias. Db2 does not accept new connection requests to the alias by using the alias port. However, Db2 can still accept requests to the alias by using the group SQL port if DDF is active and listening on it. This value applies to only those aliases that are defined and managed dynamically by the MODIFY DDF command with the ALIAS keyword.

STATIC
The alias is static. Db2 accepts new connection requests when Db2 is available to accept TCP/IP connection requests. This option applies to only those aliases that were created by the DSNJU003 utility. Such aliases cannot be defined or managed dynamically by the MODIFY DDF command.

Related information:

-MODIFY DDF (Db2) (Db2 Commands)
DSNJU003 (change log inventory) (Db2 Utilities)
MAX REMOTE ACTIVE field (MAXDBAT subsystem parameter) (Db2 Installation and Migration)

DSNL089I: Member IP address

If DDF is part of a data sharing group and all of the following conditions are true, the member IP address is displayed:

- DDF is configured to use TCP/IP network protocols. See the *tcp-port* value in message DSNL084I.
- DDF is started.
- TCP/IP initialization was successful.

```
DSNL089I MEMBER IPADDR= ip-address
```

ip-address
The IP address that is associated with the specific member of the group or with a specific location alias that represents a member or subset of members. This value is the IP address that is returned to a client in the server list for the purposes of workload balancing.

If both IPv4 and IPv6 addresses are configured, message DSNL089I is displayed twice, once for each protocol type.

DDF obtains its member IP address from one of the following places:

- The IP address that is specified on the TCP/IP PORT statement by using the BIND keyword
- The IP address that is recorded in the BSDS
- The information that is returned by a z/OS UNIX System Services getaddrinfo call

Related information:

Communicating with data sharing groups (Db2 Data Sharing Planning and Administration)
getaddrinfo (BPX1GAI, BPX4GAI) -- Get the IP address and information for a service name or location (z/OS UNIX System Services Programming: Assembler Callable Services Reference)
Starting TCP/IP support (Db2 Installation and Migration)

DSNL090I: Subsystem parameter information (CMTSTAT, CONDBAT, and MAXDBAT)

If the DETAIL option was specified on the DISPLAY DDF command, the output also includes subsystem parameter information that is associated with DDF:

```
DSNL090I DT=dt  CONDBAT=     condbat MDBAT=
mdbat
```

dt
The DDF thread value. This value corresponds to the CMTSTAT subsystem parameter. *dt* can have one of the following values:

A
DDF is configured with DDF THREADS ACTIVE.

I
DDF is configured with DDF THREADS INACTIVE.

condbat
The maximum number of inbound connections. This value corresponds to the CONDBAT subsystem parameter.

mdbat
The maximum number of database access threads (DBATs). This value corresponds to the MAXDBAT subsystem parameter.

This value determines the maximum number of *active slots*, which means the maximum number of concurrent active DBATs that can potentially execute SQL.

Related information:

DDF THREADS field (CMTSTAT subsystem parameter) (Db2 Installation and Migration)
MAX REMOTE CONNECTED field (CONDBAT subsystem parameter) (Db2 Installation and Migration)
MAX REMOTE ACTIVE field (MAXDBAT subsystem parameter) (Db2 Installation and Migration)

DSNL091I: Subsystem parameter information (MAXCONQN and MAXCONQW)

If the DETAIL option was specified on the DISPLAY DDF command, the output also includes subsystem parameter information that is associated with DDF:

```
DSNL091I MCONQN=maxconqn-value MCONQW=maxconqw-
value
```

maxconqn-value
The depth of the queue of connections that are waiting for a DBAT to process the next request. When this value is reached, and the threshold that is specified by the MAXDBAT subsystem parameter is also reached, Db2 closes the oldest waiting client connection.

This value corresponds to the MAXCONQN subsystem parameter.

maxconqw-value
The maximum amount of time that a client connection waits for a thread to process its request. Db2 attempts to close any connection that waits longer than this value.

This value corresponds to the MAXCONQW subsystem parameter.

Related information:

CONN QUEUE MAX DEPTH field (MAXCONQN susbsystem parameter) (Db2 Installation and Migration)
CONN QUEUE MAX WAIT field (MAXCONQW subsystem parameter) (Db2 Installation and Migration)

MAX REMOTE ACTIVE field (MAXDBAT subsystem parameter) (Db2 Installation and Migration)

DSNL092I and DSNL093I: DBAT and connection information

If the DETAIL option was specified on the DISPLAY DDF command, the output also includes the following information:

- The number of active, inactive, queued, and disconnected database access threads (DBATs)
- The number of queued and inactive connections

```
DSNL092I ADBAT=adbat QUEDBAT=quedbat
INADBAT=inadbat CONQUED=conqued
DSNL093I DSCDBAT=dscdbat INACONN=inaconn
```

adbat
The current number of DBATs. This number includes DBATs that are actively associated with work for remote connections and disconnected DBATs.

This value increases as new DBATs are created or when inactive DBATs become active. This value decreases as DBATs terminate or become inactive or as disconnected DBATs terminate. When this value reaches or exceeds the MAXDBAT value, newly attached connections or new work on

existing inactive connections or threads might be queued. This queueing occurs if no disconnected DBATs are available to service the work.

The MAXDBAT value is shown in message DSNL090I.

quedbat
The cumulative number of the following new work items that had to wait for a DBAT to become available:

- Newly attached connections
- New work on inactive connections
- New work on inactive DBATs
- New or existing work is suspended because it exceeded the exception threshold for the MONITOR THREADS keyword in a monitor profile.

This value is a cumulative counter that is incremented for one of the following reasons:

- The MAXDBAT limit is reached.
- An exception threshold for the MONITOR THREADS keyword in the DSN_PROFILE_ATTRIBUTES table was exceeded. That exception threshold limits the concurrent number of DBATs for certain connections.

This value corresponds to the QDSTQDBT field in IFCID 1. The *quedbat* counter is reset only when this Db2 subsystem is restarted.

A non-zero value suggests that performance and throughput might be affected. If so, consider increasing the MAXDBAT value.

The MAXDBAT value is shown in message DSNL090I.

inadbat
The current number of inactive DBATs (which were previously called type 1 inactive threads). This value applies only if the *dt* value in message DSNL090I indicates that DDF INACTIVE support is enabled.

For more information about any DBATs that are included in this number, look at the output from the DISPLAY THREAD command with the TYPE(INACTIVE) option. The DISPLAY THREAD output begins with message DSNV401I.

conqued
The current number of connection requests that are queued and are waiting to be serviced. This value applies only if the *dt* value in message DSNL090I indicates that DDF INACTIVE support is enabled.

These connections can be newly attached connections or inactive connections for which a new request arrived from the client. The number of inactive connections is shown in message DSNL093I.

These requests cannot be processed when one of the following conditions occur:

- The maximum number of DBATs is reached, and no disconnected DBATs exist to process the request.

  The maximum number of threads is reached when the *adbat* value is equal to or greater than MAXDBAT value. (The MAXDBAT value is shown in message DSNL090I.) When this situation occurs, processing continues for these queued connections when another active DBAT releases its slot either by terminating or by moving to the inactive state.
- An exception threshold will be exceeded for the MONITOR THREADS keyword in the DSN_PROFILE_ATTRIBUTES table if the connection request is processed.
- DDF is suspended or suspending. See the *status* value in message DSNL081I. Processing continues when DDF is started.

dscdbat
The current number of disconnected DBATs. This value applies only if the *dt* value in message DSNL090I indicates that DDF INACTIVE support is enabled.

This value indicates the number of DBAT pool threads. DBAT pool threads are the database access threads that are available to service queued connections requests. The DBATs that are included in this number are also accounted for in the *adbat* value.

Over time, disconnected DBATs can hold allocation duration locks. An *allocation duration lock* is a lock that persists across commit boundaries. This type of lock requires the connection to be deallocated or the thread to be enabled if it is inactive. You can release these allocation duration locks by terminating these DBATs. You can terminate disconnected DBATs by using one of the following methods:

- Issue the STOP DDF command with the MODE(SUSPEND) option. Stopping DDF with MODE(SUSPEND) terminates these disconnected DBATs without affecting current or new connections. However, activity on these current or new connections is not processed until DDF is started.

- Change the value of the POOLINAC subsystem parameter. This parameter controls the length of time after which unused disconnected DBATs are to be automatically terminated.

inaconn
The current number of inactive connections (which were previously called type 2 connections). This value applies only if the *dt* value in message DSNL090I indicates that DDF INACTIVE support is enabled.

This value represents connections with clients where the client last ended a unit of work either by a commit or rollback operation. This operation caused Db2 to change the state of the connection to inactive, which means that the DBAT is separated from the connection. The connection becomes inactive while the DBAT is made available to service new client connections or to service new requests on existing client connections.

This value is not included in the *inadbat* value. When a new request arrives from the client system on the connection, the connection is then moved to the *conqued* value.

For more information about any connections that are included in this number, look at the output from the DISPLAY THREAD command with the TYPE(INACTIVE) option. The DISPLAY THREAD output begins with message DSNV401I.

Related information:

POOL THREAD TIMEOUT field (POOLINAC subsystem parameter) (Db2 Installation and Migration)
-DISPLAY THREAD (Db2) (Db2 Commands)
-STOP DDF (Db2) (Db2 Commands)
“DSNV401I” on page 959

DSNL094I: Closed client connections

The output also includes information about connections that were closed if both of the following conditions are true:

- The DETAIL option was specified on the DISPLAY DDF command
- The Db2 subsystem is a member of a data sharing group

```
DSNL094I WLMHEALTH=health-value
CLSDCONQN=number-closed CLSDCONQW=wait-closed
```

health-value
The health indicator value that was last reported to WLM for the Db2 subsystem. This value is a number from 0 to 100.

number-closed
The number of client connections that were closed because the value of the MAXCONQN subsystem parameter was reached since DDF was last started.

wait-closed
The number of client connections that were closed because the value of the MAXCONQW subsystem parameter was reached since DDF was last started.

Related information:

IWM4HLTH – Setting Server Health Indicator (MVS Programming: Workload Management Services)
CONN QUEUE MAX DEPTH field (MAXCONQN susbsystem parameter) (Db2 Installation and Migration)
CONN QUEUE MAX WAIT field (MAXCONQW subsystem parameter) (Db2 Installation and Migration)

DSNL096I: Detailed information for a specific alias

If the ALIAS and DETAIL options were specified on the DISPLAY DDF command, the output also includes detailed information about the specific location alias:

```
DSNL096I  ADBAT=active-dbats CONQUED=concurrent-
queued TCONS=total-connections
```

active-dbats
The number of active DBATs that are currently processing requests on behalf of the specified alias.

concurrent-queued
The number of connection requests that are currently queued and waiting to be serviced on behalf of the specified alias.

total-connections
The total number of remote connections that are currently associated with the alias.

DSNL100I, DSNL101I, DSNL102I: Server list information

The output also includes server list information if the following conditions are true:

- The DETAIL option was specified on the DISPLAY DDF command
- DDF is part of a data sharing group
- DDF is configured to use TCP/IP (If the value of *tcp-port* in message DSNL084I is NONE, DDF is not configured to use TCP/IP.)

The following server list entry information is displayed for each DDF location or alias that registered to WLM as part of the data sharing group:

```
DSNL100I  LOCATION SERVER LIST:
DSNL101I  WT     IPADDR       IPADDR
DSNL102I  weight ipv4-address ipv6-address
```

Message DSNL102I is repeated for each server list entry.

The server list information is provided to remote clients that are balancing the sysplex workload. The server list information might represent a single member of the data sharing group or a location alias that represents either a single member or a subset of members. This information influences which DDF is sent future work. DDF responds with an updated server list when DDF generates the response to a connection request or a connection reuse request.

weight
The WLM weight for the DDF location or location alias that is identified by the IP addresses. If no value is displayed, WLM indicates that DDF has no capacity and the entry is not included in the server list that is provided to the remote clients.

ipv4-address
The IPv4 address that is used to identify a DDF location or location alias that is registered to WLM. The address is in colon-hexadecimal format. If no IPv4 address is configured, this IP address is not displayed.

ipv6-address
The IPv6 address that is used to identify a DDF location or location alias that is registered to WLM. The address is in colon-hexadecimal format. If no IPv6 address is configured, this IP address is not displayed.

Related information:

Communicating with data sharing groups (Db2 Data Sharing Planning and Administration)

DSNL105I and DSNL106I: DDF options

The output also includes a list of the DDF option values:

```
DSNL105I  CURRENT DDF OPTIONS ARE:
DSNL106I  option-name = option-value
```

One instance of message DSNL106I is displayed for each option.

option-name
The DDF option.

option-value
The value of the DDF option.

DSNL099I: End of output

The DISPLAY DDF output ends with the following message:

```
DSNL099I  csect  DISPLAY DDF REPORT COMPLETE
```

csect-name
The name of the control section that issued the message.

System action

Processing continues.

User response

No action is required.

Related reference
-DISPLAY DDF (Db2) (Db2 Commands)

DSNL081I **STATUS=*status***

Explanation

This message is a section of output from the DISPLAY DDF command, which is part of message "DSNL080I" on page 338.

DSNL082I **LOCATION LUNAME GENERICLU**

Explanation

This message is a section of output from the DISPLAY DDF command, which is part of message "DSNL080I" on page 338.

DSNL083I ***location luname genericlu***

Explanation

This message is a section of output from the DISPLAY DDF command, which is part of message "DSNL080I" on page 338.

DSNL084I **TCPPORT=*tcp-port***
SECPORT=*secure-port*
RESPORT=*resync-port*
IPNAME=*ip-name*

Explanation

This message is a section of output from the DISPLAY DDF command, which is part of message "DSNL080I" on page 338.

DSNL085I **IPADDR= *ip-address***

Explanation

This message is a section of output from the DISPLAY DDF command, which is part of message "DSNL080I" on page 338.

DSNL086I ***domain-type*** **DOMAIN=*domain-name***

Explanation

This message is a section of output from the DISPLAY DDF command, which is part of message "DSNL080I" on page 338.

DSNL087I **ALIAS PORT SECPORT STATUS**

Explanation

This message is a section of output from the DISPLAY DDF command, which is part of message "DSNL080I" on page 338.

DSNL088I ***alias port secure-port status***

Explanation

This message is a section of output from the DISPLAY DDF command, which is part of message "DSNL080I" on page 338.

DSNL089I **MEMBER IPADDR=** ***ip-address***

Explanation

This message is a section of output from the DISPLAY DDF command, which is part of message "DSNL080I" on page 338.

DSNL090I **DT=*dt* CONDBAT=*condbat* MDBAT=*mdbat***

Explanation

This message is a section of output from the DISPLAY DDF command, which is part of message "DSNL080I" on page 338.

DSNL091I **MCONQN=*maxconqn-value* MCONQW=*maxconqw-value***

Explanation

This message is a section of output from the DISPLAY DDF command, which is part of message "DSNL080I" on page 338.

DSNL092I **ADBAT=*adbat* QUEDBAT=*quedbat* INADBAT=*inadbat* CONQUED=*conqued***

Explanation

This message is a section of output from the DISPLAY DDF command, which is part of message "DSNL080I" on page 338.

DSNL093I **DSCDBAT=*dscdbat* INACONN=*inaconn***

Explanation

This message is a section of output from the DISPLAY DDF command, which is part of message "DSNL080I" on page 338.

DSNL094I **WLMHEALTH=*health-value* CLSDCONQN=*number-closed* CLSDCONQW=*wait-closed***

Explanation

This message is a section of output from the DISPLAY DDF command, which is part of message "DSNL080I" on page 338.

DSNL096I **ADBAT=*active-dbats* CONQUED=*concurrent-queued* TCONS=*total-connections***

Explanation

This message is a section of output from the DISPLAY DDF command, which is part of message "DSNL080I" on page 338.

DSNL099I ***csect*** **DISPLAY DDF REPORT COMPLETE**

Explanation

This message is a section of output from the DISPLAY DDF command, which is part of message "DSNL080I" on page 338.

DSNL100I **LOCATION SERVER LIST:**

Explanation

This message is a section of output from the DISPLAY DDF command, which is part of message "DSNL080I" on page 338.

DSNL101I **WT IPADDR IPADDR**

Explanation

This message is a section of output from the DISPLAY DDF command, which is part of message "DSNL080I" on page 338.

DSNL102I ***weight ipv4-address ipv6-address***

Explanation

This message is a section of output from the DISPLAY DDF command, which is part of message "DSNL080I" on page 338.

DSNL105I CURRENT DDF OPTIONS ARE:

Explanation

This message introduces a list of DDF options in response to a DISPLAY DDF command or at DDF startup.

The DISPLAY DDF output is described in message "DSNL080I" on page 338.

DSNL106I *option-name = option-value*

Explanation

This message displays DDF options in response to a DISPLAY DDF command or at DDF startup.

The DISPLAY DDF output is described in message "DSNL080I" on page 338.

DSNL199I NO ALIAS FOUND

Explanation

The DISPLAY DDF command was issued with the ALIAS keyword, but the specified alias was not found.

System action

Processing continues.

User response

Issue the DISPLAY DDF command to verify that the specified alias exists and reissue the DISPLAY DDF ALIAS command with the correct alias name.

Related reference

-DISPLAY DDF (Db2) (Db2 Commands)

DSNL200I DISPLAY LOCATION REPORT FOLLOWS-

Explanation

This message displays output from the DISPLAY LOCATION command.

- Output heading
- No locations found
- Truncated output
- Detail output
- #unique_1170/unique_1170_Connect_42_sect-endcont
- Output conclusion

Output heading

The output heading is followed by information about connections with remote locations:

LOCATION
The identifier for the remote location.

- For TCP/IP requester connections, the location is the IP address concatenated with the port number of the remote location. For TCP/IP server connections, the location is the IP address of the remote location.
- For SNA connections, the location is the LU name of the remote location.

PRDID
An alphanumeric string that identifies the product.

The format of product identifier values is *pppvvrrm*, where *ppp* is a 3-letter product code (such as DSN for Db2), *vv* is the version, *rr* is the release, and *m* is the modification level. For example, DSN11015 identifies Db2 11 in new-function mode, the value is 'DSN11015'. The product code (*ppp*) is one of the following values:

AQT for IBM Db2 Analytics Accelerator for z/OS
ARI for DB2 Server for VSE & VM
DSN for Db2 for z/OS
HTP for non-secure HTTP URL connections for Db2 native REST services
HTS for secure HTTPS connections for Db2 native REST services
JCC for IBM Data Server Driver for JDBC and SQLJ
QSQ for DB2 for i
SQL for Db2 for Linux®, UNIX, and Windows

Modification (*m*) values have the following meanings:

0
Conversion and enabling-new-function modes for migration from DB2 10 (CM10, CM10*, ENFM10, and ENFM10*)

5
New-function mode.

T
The connection type with the remote location. Expected values are:

R
A requester connection from the local subsystem that is accessing a remote system.

S
A server connection from a remote system that is accessing the local subsystem.

G
A server connection from a remote system that is accessing the local subsystem and has indicated that it is a Db2 Connect server/ gateway.

ATT and CONNS
The type and number of connections with the partner location. When the ATT column is blank, the value of CONNS is the total number of connections with the partner location. The ATT column is blank unless the DETAIL option is specified.

The meanings of the ATT values are:

AES
The connection uses AES encryption.

CBF
The connection is a secondary connection for an application that uses package-based continuous block fetch.

IPS
The connection uses Internet Protocol security (IPSec).

TLS
The connection uses a secure sockets layer (SSL) that is provided by Application Transparent-Transport Layer Security (AT-TLS).

TRS
The connection is a trusted connection.

WLB
The connection is from a client that is using Sysplex workload balancing.

XA
The connection is part of a distributed transaction.

No locations found

When the DISPLAY LOCATION command is unable to find any locations that are associated with the specified list of locations, a message line indicates that no locations were found.

If all locations were specified, there is no distributed activity. If a location list was specified, reissue the DISPLAY LOCATION command with the LOCATION(*) parameter to display information for all locations.

Truncated output
If the output was generated in response to a command from an MVS console and more than 254 response messages were generated, the output is truncated. A message line indicates this truncation.

You can reissue the DISPLAY LOCATION command and specify a specific location or list of locations to see complete output for that context.

Detail output

When a DISPLAY LOCATION command is issued with the DETAIL option, the output might contain additional lines for each remote location.

The output might contain one or more lines that provide information about the number of connections from or to remote systems that have certain attributes:

LOCATION
The identifier for the remote location.

- For TCP/IP requester connections, the location is the IP address concatenated with the port number of the remote location. For TCP/IP server connections, the location is the IP address of the remote location.
- For SNA connections, the location is the LU name of the remote location.

PRDID
An alphanumeric string that identifies the product.

The format of product identifier values is *pppvvrrm*, where *ppp* is a 3-letter product code (such as DSN for Db2), *vv* is the version, *rr* is the release, and *m* is the modification level. For example, DSN11015 identifies Db2 11 in new-function mode, the value is 'DSN11015'. The product code (*ppp*) is one of the following values:

AQT for IBM Db2 Analytics Accelerator for z/OS
ARI for DB2 Server for VSE & VM
DSN for Db2 for z/OS
HTP for non-secure HTTP URL connections for Db2 native REST services
HTS for secure HTTPS connections for Db2 native REST services
JCC for IBM Data Server Driver for JDBC and SQLJ
QSQ for DB2 for i
SQL for Db2 for Linux, UNIX, and Windows

Modification (*m*) values have the following meanings:

0
Conversion and enabling-new-function modes for migration from DB2 10 (CM10, CM10*, ENFM10, and ENFM10*)

5
New-function mode.

T
The connection type with the remote location. Expected values are:

R
A requester connection from the local subsystem that is accessing a remote system.

S
A server connection from a remote system that is accessing the local subsystem.

G
A server connection from a remote system that is accessing the local subsystem and has indicated that it is a Db2 Connect server/ gateway.

ATT and CONNS
The number of connections that are associated with the remote location and that have the attribute that is identified by the ATT column. Because more than one attribute might apply to the same connection, the total number of connections is not the sum of the numbers for the different attributes. The expected values for ATT are:

AES
Using security credentials with AES encryption.

IPS
Using IPSec.

TLS
SSL using Application Transparent-Transport Layer Security (AT-TLS).

TRS
Using trusted context.

WLB
Using workload balancing connections.

XA
Using XA transaction manager processing.

The output might also include lines that contain detailed information about the connections that are associated with the Db2 system thread. A line that is identified by the partial message number L203 provides descriptive headings. The lines that follow are identified by the partial message number L204.

SYSTASK
Describes the Db2 system threads. The expected values are:

SYSPLX-*x*
Indicates SNA-related SYSPLEX processing where Db2 systems periodically create connections to a remote data sharing group to obtain WLM balancing information that is related to all members of the group.

The expected values of *x* are:

O
The local Db2 system is contacting a remote member of a data sharing group to request WLM balancing information.

I
The local Db2 system is receiving a connection that requests WLM balancing information.

RESYNC
A connection that is used to resynchronize a unit of work that encountered a previous thread or communication error. One line is displayed for each thread that needs resynchronization with the remote site.

SESSID
The identifier of the session:

- For SNA network connections, the VTAM-defined session instance identifier of the session on which the conversation is executing. If the session identifier is not applicable, this field contains zeros.

  You can use the VTAM DISPLAY NET,ID=*db2-luname*,SCOPE=ACT command to obtain the full session ID. The DISPLAY NET command lists all sessions (SID) for the Db2 logical unit. Scan the DISPLAY NET output for the complete SID.
- For Internet Protocol network connections, a string in the format *local:remote*, where:

  local
  Specifies the local Db2 system's TCP/IP port number.

  remote
  Specifies the remote partner's TCP/IP port number.

A
The connection activity:

N
The connection is active in the network.

W
The connection is suspended in Db2 and is waiting for VTAM or TCP/IP notification that the function is complete.

blank
No specific activity condition exists.

ST
The status of the connection:

A
The connection is in allocation.

C
Session limits are being negotiated (CNOS) with the SNA partner before connection allocation.

D
The connection is in deallocation.

R
Receiving.

S
Sending.

blank
No specific status condition exists.

TIME
The timestamp of the last message that is sent or received on the connection, in the format *yydddhhmmssth*, where

yy
The last two digits of the year.

ddd
The number of the day in the year. For example, February 1 is represented as 032.

hhmmssth
The time of day in 24-hour format, to hundredths of the second.

Output conclusion
The following line identifies the end of the output of the DISPLAY LOCATION command:

```
DISPLAY LOCATION REPORT COMPLETE
```

System action

Processing continues.

User response

No action is required.

Related tasks
Displaying information about connections with other locations (Db2 Administration Guide)
Related reference
-DISPLAY LOCATION (Db2) (Db2 Commands)

DSNL203I L203-SYSTASK SESSID A ST TIME

Explanation

This message forms the heading for the listing of Db2 system threads that communicate with other locations. This message is issued when a detail display is specified on the DISPLAY LOCATION command. For descriptions of the message contents, see "DSNL200I" on page 348.

The message number and subsystem recognition character are not included in this message. However, L203 is included in the message text to identify the message.

System action

Processing continues.

Related reference
-DISPLAY LOCATION (Db2) (Db2 Commands)
Related information
DSNL200I
DISPLAY LOCATION REPORT FOLLOWS-

DSNL204I L204-*system-task session-ID activity status time*

Explanation

This message follows the DSNL203I message for a remote location when a detail display is specified on the DISPLAY LOCATION command. This message is displayed for each conversation owned by a Db2 system thread that communicates with the site. For descriptions of the message contents, see "DSNL200I" on page 348.

The message number and subsystem recognition character are not included in this message. However, L204 is included in the message text to identify the message.

System action

Processing continues.

Related reference
-DISPLAY LOCATION (Db2) (Db2 Commands)
Related information
DSNL200I
DISPLAY LOCATION REPORT FOLLOWS-

DSNL206I *csect-name named-command* COMMAND INVALID, *reason*

Explanation

The specified command could not be processed.

csect-name
The name of the control section that issued the message.

named-command
The command that could not be processed.

reason
The reason that the command could not be processed.

System action

Processing continues.

DSNL300I *csect-name* MODIFY DDF REPORT FOLLOWS:

Explanation

Processing of the MODIFY DDF command has begun. Additional messages about the command follow this message. Message DSNL301I is issued when command processing is complete.

csect-name
The name of the control section that issued the message.

System action

Processing continues.

User response

No action is required.

Related reference
-MODIFY DDF (Db2) (Db2 Commands)

DSNL301I ***csect-name*** **MODIFY DDF REPORT COMPLETE**

Explanation

Processing of the MODIFY DDF command is complete.

csect-name
The name of the control section that issued the message.

System action

Processing continues.

User response

No action is required.

Related reference
-MODIFY DDF (Db2) (Db2 Commands)

DSNL302I ***option-name*** **IS SET TO** ***option-value***

Explanation

A MODIFY DDF command has changed an option.

option-name
The name of the DDF processing option.

option-value
The new value of the named processing option. When *option-name* is PKGREL, possible values are:

BNDOPT
When a connection which has used a high performance DBAT terminates, the high performance DBAT is also be deallocated.

BNDPOOL
DDF processing is the as BNDOPT, with the following exception. When a connection that was used for a high performance DBAT terminates, the high performance DBAT is pooled. The pooled DBAT can then be used by another connection that presents a request to the subsystem.

COMMIT
Packages are always allocated under RELEASE(COMMIT) rules regardless of their package RELEASE bind option value.

When an access thread has completed a unit of work, and the DBAT can be pooled, DDF pools the DBAT, makes an accounting record, deletes the current WLM enclave, and inactivates the connection. Pooled access threads release all package allocation locks.

If the CMTSTAT subsystem parameter is set to ACTIVE, then the message will always indicate that PKGREL IS SET TO COMMIT, regardless of the value specified on the command.

System action

Processing continues.

User response

No action is required.

Related reference
-MODIFY DDF (Db2) (Db2 Commands)

DSNL303I **THE MODIFY DDF COMMAND FAILED WITH RC=*return-code* and RSN=*reason-code***

Explanation

A BSDS error was encountered.

return-code
Db2 return code from the BSDS function.

reason-code
Db2 reason code from the BSDS function.

System action

The command is not processed.

User response

Analyze the return code and reason code to determine what type of error occurred. Refer to messages DSNJ107I and DSNJ108I for more information.

DSNL304I THE ALIAS *alias-name* ALREADY EXISTS.

Explanation

The MODIFY DDF command was issued to add an ALIAS but the requested alias name already exists and the alias cannot be added.

alias-name
The name of the location alias.

System action

The command is not processed.

User response

Specify an alias that does not already exist. You can use the output from DISPLAY DDF command to see the list of aliases that are currently defined.

DSNL305I THE ALIAS *alias-name* DOES NOT EXIST.

Explanation

The MODIFY DDF command was issued against an alias that does not exist.

alias-name
The name defines the location alias.

System action

The command is not processed.

User response

Specify an alias that already exists. You can use the output from the DISPLAY DDF command to see the list of aliases that are currently defined.

DSNL306I THE MAXIMUM NUMBER OF SUPPORTED ALIASES HAS BEEN EXCEEDED.

Explanation

The modify DDF command was issued to add a new alias, but the new alias would exceed the maximum number of aliases that can be defined. You can define as many as 40 aliases by using the MODIFY DDF command.

System action

The command is not processed.

User response

Delete unneeded aliases before adding additional aliases. You can use the output from the DISPLAY DDF command to see the list of currently defined aliases.

DSNL307I *invalid-value* IS NOT A VALID PARAMETER FOR *keyword*.

Explanation

An invalid parameter value is specified for the MODIFY DDF command.

invalid-value
The invalid value that was specified.

keyword
The option keyword for which the invalid value was specified.

IPv4
invalid-value is not in the dotted decimal format.

IPv6
invalid-value is not in the colon hexadecimal format.

PORT
invalid-value is not a decimal number between 1 and 65535, including 65535.

SECPORT
invalid-value is not a decimal number between 1 and 65535, including 65535.

ALIAS
invalid-value is not a valid alias name. The alias name must meet all of the following requirements:

- Contains a maximum of 16 characters
- Contains only letters (excluding alphabetic extenders), numbers, or the underscore character.
- Begins with a letter.

System action

The command is not processed.

User response

Reissue the command and specify a value in the valid format for the keyword that you specified.

DSNL308I NO *address-port* IS DEFINED FOR THE ALIAS *alias-name*.

Explanation

The MODIFY DDF command was issued to delete an IP address or port , but an IP address or port is not associated with the ALIAS.

address-port
One of the following values:

IPV4 ADDRESS
No IPv4 address is defined for the alias.

IPV6 ADDRESS
No IPv6 address is defined for the alias.

PORT
No port is defined for the alias.

SECPORT
No secure port is defined for the alias.

alias-name
The name of the location alias.

System action

The command is not processed.

User response

Use the output from the DISPLAY DDF command with the ALIAS keyword to see the list of IP addresses, ports, and secure ports that are associated with each alias.

DSNL309I MEMBER-SPECIFIC IP ADDRESSES ARE NOT DEFINED.

Explanation

DDF is stopped and its TCP/IP configuration is unknown or DDF is started but configured to receive only from a specific IP address.

To issue a MODIFY DDF command with the ALIAS keyword and the IPV4 or IPV6 option, DDF must be configured to receive from any IP address. To configure DDF to receive from any IP address, the DDF communications record that is defined in the BSDS must be configured with the DDF IPV4 or IPV6 option. The MODIFY DDF command can be used to add or modify alias IP addresses only when an IP address is defined by the DSNJU003 utility and not by the PORT statement of the TCP/IP profile.

System action

The command is not processed.

User response

Use the output from DSNJU004 utility (the DDF communication record) to verify that no IP address was specified in the BSDS. Specify at least one IP address by using the DSNJU003 utility.

DSNL310I THE ALIAS *keyword keyword-value* IS ALREADY IN USE.

Explanation

The port number specified for the PORT or SECPORT keyword in the MODIFY DDF command is already in use for the location, or for a different alias.

keyword
PORT or SECPORT

keyword-value
The value specified for the PORT or SECPORT keyword.

System action

The command is not processed.

User response

Use the output from the DISPLAY DDF command to see the ports that are defined for each alias and location name.

DSNL311I THE ALIAS *alias-name* CANNOT BE STARTED.

Explanation

The specified alias cannot be started because it is not stopped or canceled.

alias-name
The name of the location alias.

System action

The command is not processed.

User response

Use the output from DISPLAY DDF command to check the status of each alias. Only stopped or canceled aliases can be started.

DSNL312I THE ALIAS *alias-name* CANNOT BE STOPPED OR CANCELED.

Explanation

The MODIFY DDF command was issued with the ALIAS parameter to stop or cancel an alias but the alias is not started.

alias-name
The name of the location alias.

System action

The command is not processed.

User response

Use the output from DISPLAY DDF command to check the status of each alias. Only started aliases can be stopped, and only started aliases can be canceled.

DSNL313I THE ALIAS *alias-name* CANNOT BE MODIFIED OR DELETED.

Explanation

The MODIFY DDF command was issued to modify an attribute of an alias that is already started. The alias must be stopped or canceled before it can be modified or deleted.

alias-name
The name that specifies the location alias.

System action

The command is not processed.

User response

Stop or cancel the specified alias, and then modify the alias attribute, or delete the alias. Use the output from DISPLAY DDF command (DSNL088I) to see the status of each alias.

DSNL314I THE ALIAS *alias-name* IS *state*.

Explanation

The MODIFY DDF command was issued with the ALIAS keyword to start, stop, or cancel an alias, and the specified operation was successful.

alias-name
The name of the location alias.

state
Whether the alias was STARTED, STOPPED, or CANCELED.

System action

The system action depends on the action that was successful:

STARTED
Db2 begins accepting new connections for the alias.

STOPPED
Db2 stops accepting new connections to the alias. All database access threads processing connections to the specified alias have finished their processing.

CANCELED
Db2 stops accepting new connections to the alias and cancels all existing connections.

User response

No action required.

DSNL315I A DYNAMICALLY DEFINED ALIAS WITH NAME *alias-name* ALREADY EXISTS.

Explanation

An alias that was defined by the DSNJU003 utility has the same name as an existing alias that was already defined by the MODIFY DDF commands. The new alias that was defined by the DSNJU003 utility is ignored because the alias that was defined by the MODIFY DDF command takes precedence.

System action

The existing alias that was defined by the MODIFY DDF command is used and new the statically defined alias is ignored.

User response

You can define location aliases statically by using the using DSNJU003 utility or dynamically by using the MODIFY DDF command. Dynamic aliases are preferable because you can define and modify them without stopping and restarting Db2 or DDF. When a static and dynamic alias each have the same name, only the dynamic alias is used. If you want to use the statically defined alias instead, use the MODIFY DDF command to delete the dynamic location alias that has the matching name. You can use the output from DISPLAY DDF command to see the list of aliases that are currently defined. The alias status is 'STATIC' for statically defined aliases.

DSNL400E INDOUBT THREAD RESOLUTION WITH COORDINATOR *location* SHOWS HEURISTIC DAMAGE FOR *luwid=token* - REMOTE COMMIT VERSUS LOCAL ABORT. INFORMATION RECORDED IN TRACE RECORD WITH IFCID=207 AND IFCID SEQUENCE NUMBER=*seq-no1* AND IN TRACE RECORD WITH IFCID=203 AND IFCID SEQUENCE NUMBER=*seq-no2*

Explanation

Db2 has participant responsibility in the logical unit of work identified by 'luwid=token'. Resolution with the

coordinator identified by 'location' shows heuristic damage occurred. The Db2 thread representing the logical unit of work was previously resolved using the RECOVER INDOUBT command. The action taken was to abort the thread. Subsequently, communication was reestablished with the coordinator and resolution shows that the coordinator committed the thread.

- The application was told that commit succeeded.
- Any resources updated at the coordinator were committed.
- Updated resources at this Db2 were rolled back.

location
The field contains one of the following:

- The requester's relational database name (location name)
- The requester's VTAM LU name (<luname>)
- The requester's IP address

luwid=token
The global logical unit of work id and the local token that identify the thread.

seq-no1
The IFCID sequence number associated with the 207 trace record. The sequence number is printed in hexadecimal format. If the sequence number is zero, IFCID 207 was not active or it was active with a destination of the resident trace table only. IFCID 207 is a member of statistics class 4, which has a default destination of SMF. This trace record is written when the heuristic damage condition was detected and contains information about the damage condition.

seq-no2
The IFCID sequence number associated with the 203 trace record. The sequence number is printed in hexadecimal format. If the sequence number is zero, IFCID 203 was not active or it was active with a destination of the resident trace table only. IFCID 203 is a member of statistics class 4, which has a default destination of SMF. This trace record was written when the heuristic decision to commit or abort was made and contains information about the decision, including the names of any downstream participants.

System action

Alert A004 is generated. A trace record whose IFCID=207 is written. Indoubt resolution with the coordinator completes.

System programmer response

Determine the destination of statistics class 4 and locate and print the trace record with SEQUENCE NUMBER='seq-no1'. Call the database administrator.

Database Administrator Action: Correct the damage. This is not an easy task. Since the time of the heuristic action, the data that was aborted with the RECOVER INDOUBT command might have been used by many applications - read and/or write. Correcting the damage might involve reversing the effects of these applications as well. Tools available are:

- The statistics trace class 4 contains an IFCID 207 trace record. This record contains the RBA of the first Db2 log record written for the logical unit of work whose LUWID is included in this message.
- The DSN1LOGP utility provides a summary report that identifies the table spaces modified by the logical unit of work and any downstream participant locations involved in the logical unit of work.
- DISPLAY THREAD TYPE(INDOUBT) displays the RBA of the first Db2 log record written for the logical unit of work whose LUWID is included in this message. This information continues to appear in the DISPLAY THREAD report until it is purged with the RESET INDOUBT command.

Contact your IBM Support Center for further assistance.

DSNL401E **INDOUBT THREAD RESOLUTION WITH COORDINATOR *location* SHOWS HEURISTIC DAMAGE FOR *luwid=token* - REMOTE ABORT VERSUS LOCAL COMMIT. INFORMATION RECORDED IN TRACE RECORD WITH IFCID=207 AND IFCID SEQUENCE NUMBER=*seq-no1* AND IN TRACE RECORD WITH IFCID=203 AND IFCID SEQUENCE NUMBER=*seq-no2***

Explanation

Db2 has participant responsibility in the logical unit of work identified by 'luwid=token'. Resolution with the coordinator identified by 'location' shows heuristic damage occurred. The Db2 thread representing the logical unit of work was previously resolved with the RECOVER INDOUBT command. The action taken was to commit the thread. Subsequently, communication was reestablished with the coordinator and resolution shows that the coordinator aborted the thread.

- The application was told that commit failed.
- Any resources updated at the coordinator were rolled back.

- Updated resources at this Db2 were committed.

location
The field contains one of the following:

- The requester's relational database name (location name)
- The requester's VTAM LU name (<luname>)
- The requester's IP address

luwid=token
The global logical unit of work id and the local token that identify the thread.

seq-no1
The IFCID sequence number associated with the 207 trace record. The sequence number is printed in hexadecimal format. If the sequence number is zero, IFCID 207 was not active or it was active with a destination of the resident trace table only. IFCID 207 is a member of statistics class 4, which has a default destination of SMF. This trace record is written when the heuristic damage condition was detected and contains information about the damage condition.

seq-no2
The IFCID sequence number associated with the 203 trace record. The sequence number is printed in hexadecimal format. If the sequence number is zero, IFCID 203 was not active or it was active with a destination of the resident trace table only. IFCID 203 is a member of statistics class 4, which has a default destination of SMF. This trace record was written when the heuristic decision to commit or abort was made and contains information about the decision, including the names of any downstream participants.

System action

Alert A004 is generated. A trace record whose IFCID=207 is written. Indoubt resolution with the coordinator completes.

System programmer response

Determine the destination of statistics class 4. Locate and print the trace record with SEQUENCE NUMBER='seq-no1'. Call the database administrator.

Database Administrator Action: Correct the damage. This is not an easy task. Since the time of the heuristic action, the data that was committed with the RECOVER INDOUBT command might have been used by many applications - read and/or write. Correcting the damage might involve reversing the effects of these applications as well. Tools available are:

- The statistics trace class 4 contains an IFCID 207 trace record. This record contains the RBA of the first Db2 log record written for the logical unit of work whose LUWID is included in this message.
- The DSN1LOGP utility provides a summary report that identifies the table spaces modified by the logical unit of work, and any downstream participant locations involved in the logical unit of work.
- DISPLAY THREAD TYPE(INDOUBT) displays the RBA of the first Db2 log record written for the logical unit of work whose LUWID is included in this message. This information continues to appear in the DISPLAY THREAD report until it is purged with the RESET INDOUBT command.

Contact your IBM Support Center for further assistance.

DSNL402I **INDOUBT THREAD RESOLUTION WITH PARTICIPANT *location* SHOWS HEURISTIC DAMAGE FOR *luwid=token* - REMOTE COMMIT VERSUS LOCAL ABORT. INFORMATION RECORDED IN TRACE RECORD WITH IFCID=207 AND IFCID SEQUENCE NUMBER=*seq-no***

Explanation

Db2 has coordinator responsibility for the logical unit of work identified by 'luwid=token'. Resolution with a participant shows heuristic damage occurred. The participant identified by 'location' manually resolved the indoubt thread identified by 'luwid=token'. The action taken was to commit the thread. This is inconsistent with the abort decision of the coordinator.

- The application was told that commit failed.
- Any resources updated at the participant were committed.
- Updated resources at this Db2 were rolled back.

location
The field contains one of the following:

- The requester's relational database name (location name)
- The requester's VTAM LU name (<luname>)
- The requester's IP address

luwid=token
The global logical unit of work id and the local token that identify the thread.

seq-no
The IFCID sequence number associated with the trace record. The sequence number is printed in hexadecimal format. If the sequence number is zero, then IFCID 207 was not active or it was active with a destination of the resident trace table

only. IFCID 207 is a member of statistics class 4, which has a default destination of SMF.

If the location specified refers to a Db2 for Linux, UNIX, and Windows system that is running at the DB2 9 level or later, and that server location has enabled access to non-Db2 databases through the Federated Database or Information Integrator capability, then any updates made to that downstream non-Db2 database will be processed under the control of the Db2 for Linux, UNIX, and Windows unprotected update capability. This permits changes to be made to this downstream non-Db2 database, even when the changes were being requested through applications running under two-phase commit or protected update control, such as CICS and IMS. During phase one of commit processing, the Db2 for Linux, UNIX, and Windows server will have actually committed the changes to the downstream non-Db2 database by the time it replies to this Db2 that it is prepared to accept a commit decision from. However, if during phase one commit negotiation with other downstream database servers and other coordinated resource managers from CICS or IMS, the decision is made to abort the unit of work, this will result in heuristic damage to the data at the non-Db2 database downstream of the Db2 for Linux, UNIX, and Windows server. No attempts will be made to resync with the identified remote location server, and a Db2 indoubt thread will not be left in Db2 to reflect this issue.

System action

Alert A004 is generated. A trace record whose IFCID=207 is written. Indoubt resolution with the participant completes.

System programmer response

Call the database administrator.

Database Administrator Action: Inform the database administrator at 'location' that heuristic damage occurred for the logical unit of work with LUWID='luwid'. Db2 was the coordinator for the logical unit of work and made the decision to abort the database updates made by 'luwid'. At 'location' a heuristic decision was made to COMMIT the updates made by 'luwid'.

Information about the heuristic damage continues to appear in the DISPLAY THREAD TYPE(INDOUBT) report until it is purged with the RESET INDOUBT command.

DSNL403I **INDOUBT THREAD RESOLUTION WITH PARTICIPANT *location* SHOWS HEURISTIC DAMAGE FOR *luwid=token* - REMOTE ABORT VERSUS LOCAL COMMIT. INFORMATION RECORDED IN TRACE RECORD WITH IFCID=207 AND IFCID SEQUENCE NUMBER=*seq-no***

Explanation

Db2 has coordinator responsibility for the logical unit of work identified by 'luwid=token'. Resolution with a participant shows heuristic damage occurred. The participant identified by 'location' manually resolved the indoubt thread identified by 'luwid=token'. The action taken was to abort the thread. This is inconsistent with the commit decision of the coordinator.

- The application was told that commit succeeded.
- Any resources updated at the participant were rolled back.
- Updated resources at this Db2 were committed.

location
This field contains one of the following:

- The requester's relational database name (location name)
- The requester's VTAM LU name (<luname>)
- The requester's IP address

luwid=token
The global logical unit of work id and the local token that identify the thread.

seq-no
The IFCID sequence number associated with the trace record. The sequence number is printed in hexadecimal format. If the sequence number is zero, IFCID 207 was not active or it was active with a destination of the resident trace table only. IFCID 207 is a member of statistics class 4, which has a default destination of SMF.

System action

Alert A004 is generated. A trace record with IFCID 207 is written. Indoubt resolution with the participant completes.

System programmer response

Call the database administrator.

Database Administrator Action: Inform the database administrator at 'location' that heuristic damage occurred for the logical unit of work with LUWID='luwid'. Db2 was the coordinator for the logical unit of work and made the decision to COMMIT the database updates made by 'luwid'. At 'location' a heuristic decision was made to back out (ABORT) the updates made by 'luwid'.

Information about the heuristic damage continues to appear in the DISPLAY THREAD TYPE(INDOUBT) report until it is purged with the RESET INDOUBT command.

DSNL404E **PROTOCOL ERROR DURING INDOUBT THREAD RESOLUTION WITH COORDINATOR *location* LUWID=*luwid=token* INFORMATION RECORDED IN TRACE RECORD WITH IFCID=206 AND IFCID SEQUENCE NUMBER=*seq-no***

Explanation

Db2 has participant responsibility for the logical unit of work identified by 'luwid=token'. The Db2 thread associated with the logical unit of work is indoubt. A protocol error occurred during indoubt resolution with the coordinator identified by 'location'.

location
Either the relational database name (location-name) or the logical unit name (<luname>) of the coordinator.

luwid=token
The global logical unit of work id and the local token that identify the thread.

seq-no
The IFCID sequence number associated with the trace record. The sequence number is printed in hexadecimal format. If the sequence number is zero, IFCID 206 was not active or it was active with a destination of the resident trace table only. IFCID 206 is a member of statistics class 4, which has a default destination of SMF.

System action

The indoubt thread remains indoubt. Alert A003 is generated. A trace record whose IFCID=206 is written.

System programmer response

This is an APARable error, probably at the coordinator, but possibly at the Db2 participant. The Db2 documentation required is contained in the statistics class 4 trace record that was written. Determine the destination of statistics class 4. Locate and print the trace record with SEQUENCE NUMBER='seq-no'.

Call the database administrator.

Database Administrator Action: Db2 does not attempt to automatically resolve the indoubt thread. The indoubt thread must be manually resolved. The commit or abort decision made at the coordinator must be determined so that the same decision can be made at this participant Db2.

Contact the database administrator at the coordinator location to determine whether the thread with LUWID=luwid committed or aborted.

If the coordinator system is another Db2, the following steps can be taken at the Db2 coordinator to determine the commit or abort decision.

1. If the coordinator Db2 system is running and a Db2 conditional restart was not performed since the error was detected at this (the participant) location, ask the database administrator at the Db2 coordinator location to issue one of the following DISPLAY THREAD TYPE(INDOUBT) commands:
   - A -DISPLAY THREAD TYPE(INDOUBT), using the LOCATION keyword and specifying the location name of the local Db2.
   - A -DISPLAY THREAD TYPE(INDOUBT) LUWID(luwid)

   If a thread with LUWID=luwid appears in the display, then the display also includes the commit or abort decision. If no thread with LUWID=luwid appears in the display, the thread was aborted.
2. If the Db2 coordinator is down, or if a conditional restart was performed there, ask the database administrator at the Db2 coordinator to run DSN1LOGP, specifying SUMMARY(ONLY) FILTER LUWID(luwid). The output from DSN1LOGP includes the commit or abort decision.

Use the RECOVER INDOUBT command at this (the participant) location to resolve the indoubt thread.

DSNL405I **THREAD *luwid=token* PLACED IN INDOUBT STATE BECAUSE OF COMMUNICATION FAILURE WITH COORDINATOR *location*. INFORMATION RECORDED IN TRACE RECORD WITH IFCID=209 AND IFCID SEQUENCE NUMBER=*seq-no***

Explanation

During execution of the two phase commit protocol with the coordinator identified by 'location', communication failed. Phase 1 of the protocol completed and the thread is prepared for either commit or abort.

The thread is placed in the indoubt state and appears in a DISPLAY THREAD TYPE (INDOUBT) report. Periodic attempts are made to reestablish communication with the coordinator for automatic indoubt resolution. If successful, message DSNL407 or DSNL415 is written.

luwid=token
The global logical unit of work id and the local token that identify the thread.

location
This field contains one of the following:

- The requester's relational database name (location name)
- The requester's VTAM LU name (<luname>)
- The requester's IP address

seq-no
The IFCID sequence number associated with the trace record. The sequence number is printed in hexadecimal format. If the sequence number is zero, IFCID 209 was not active or it was active with a destination of the resident trace table only. IFCID 209 is a member of statistics class 4, which has a default destination of SMF.

System action

Alert A006 is generated. A trace record whose IFCID=209 is written.

Operator response

If message DSNL407 or DSNL415 for the LUWID specified in the DSNL405 message does not appear in a reasonable amount of time, call the system programmer.

System programmer response

Determine the cause of the communication failure and have the problem fixed. Db2 periodically attempts to reestablish communication. If the problem cannot be fixed in a reasonable amount of time, call the database administrator. Manual resolution of the indoubt thread might be necessary to release locked resources.

Database Administrator Action: Take the following actions to resolve this thread using manual means (that is, take heuristic action) if it is necessary to release locks held by this thread.

- Determine the proper commit or abort decision by contacting the database administrator at the coordinator 'location' shown in this message in order to determine whether the thread with LUWID=luwid committed or aborted.

  If the coordinator system is another Db2, the following steps can be taken at the Db2 coordinator to determine the commit or abort decision.

  1. If the coordinator Db2 system is running and a Db2 conditional restart was not performed since the error was detected at this (the participant) location, ask the database administrator at the Db2 coordinator location to issue one of the following DISPLAY THREAD TYPE(INDOUBT) commands:
     - A -DISPLAY THREAD TYPE(INDOUBT), using the LOCATION keyword and specifying the location name of the local Db2.
     - A -DISPLAY THREAD TYPE(INDOUBT) LUWID(luwid)

     If a thread with LUWID=luwid appears in the display, then the display also includes the commit or abort decision. If no thread with LUWID=luwid appears in the display, then the thread was aborted.
  2. If the Db2 coordinator is down or if a conditional restart was performed there, ask the database administrator at the Db2 coordinator to run DSN1LOGP, specifying SUMMARY(ONLY) FILTER LUWID(luwid). The output from DSN1LOGP includes the commit or abort decision.
- Use the RECOVER INDOUBT command to commit or abort the thread.

DSNL406I **THREAD *luwid=token* AT PARTICIPANT *location* MAY BE INDOUBT BECAUSE OF A COMMUNICATION FAILURE. DB2 COMMITTED THE THREAD. INFORMATION RECORDED IN TRACE RECORD WITH IFCID=209 AND IFCID SEQUENCE NUMBER=*seq-no***

Explanation

During execution of the two phase commit protocol with the participant identified by 'location', communications failed. Phase 1 of the protocol completed with the participant, which is prepared to either commit or abort. The decision to commit the thread was made, but cannot be communicated to the participant at this time. The participant is indoubt.

Db2 becomes responsible for indoubt resolution with the participant. This responsibility appears in a DISPLAY THREAD TYPE (INDOUBT) report. Periodic attempts are made to reestablish communication with the participant for automatic indoubt resolution. If successful, message DSNL423 is written.

luwid=token
The global logical unit of work id and the local token that identify the thread.

location
This field contains one of the following:

- The requester's relational database name (location name)

- The requester's VTAM LU name (<luname>)
- The requester's IP address

seq-no
The IFCID sequence number associated with the trace record. The sequence number is printed in hexadecimal format. If the sequence number is zero, IFCID 209 was not active or it was active with a destination of the resident trace table only. IFCID 209 is a member of statistics class 4, which has a default destination of SMF.

System action

Alert A006 is generated. A trace record whose IFCID=209 is written.

Operator response

If message DSNL423 for the LUWID specified in message DSNL406 does not appear in a reasonable amount of time, call the system programmer.

System programmer response

Determine the cause of the communication failure and have the problem fixed. Db2 periodically attempts to reestablish communication. If the problem cannot be fixed in a reasonable amount of time, call the database administrator. The participant might need to manually resolve the indoubt state to release locked resources.

Database Administrator Action: If the unit of work with LUWID=luwid is indoubt at 'location', inform the database administrator there that the logical unit of work with LUWID=luwid was committed to assist in manual resolution of the indoubt thread at 'location'.

DSNL407I **AUTOMATIC RESOLUTION OF *luwid=token* WITH COORDINATOR *location* RESULTED IN COMMIT**

Explanation

The identified indoubt logical unit of work was automatically resolved by communication with the coordinator location. After automatic resolution, this message is issued if message DSNL405 was previously issued to report the thread as indoubt. This message is not issued if message DSNL405 occurs in one restart of DDF or Db2, and automatic resolution occurs in a different restart of DDF or Db2.

luwid=token
The global logical unit of work id and the local token that identify the thread

location
This field contains one of the following:

- The requester's relational database name (location name)
- The requester's VTAM LU name (<luname>)
- The requester's IP address

System action

Processing continues normally.

DSNL408I **INDOUBT THREAD RESOLUTION WITH COORDINATOR *location* SHOWS HEURISTIC DAMAGE AT PARTICIPANT *location* FOR *luwid=token* - COORDINATOR COMMIT VERSUS PARTICIPANT ABORT. INFORMATION RECORDED IN TRACE RECORD WITH IFCID=207 AND IFCID SEQUENCE NUMBER=*seq-no***

Explanation

Db2 has participant responsibility in the logical unit of work identified by 'luwid=token' for the coordinator at COORDINATOR 'location' and coordination responsibility in the same logical unit of work for the participant at PARTICIPANT 'location'. Heuristic damage occurred.

- The application was told that commit succeeded.
- Any resources updated at the coordinator and at this Db2 were committed.
- Updated resources at the participant were rolled back.

location
This field contains one of the following:

- The requester's relational database name (location name)
- The requester's VTAM LU name (<luname>)
- The requester's IP address

luwid=token
The global logical unit of work id and the local token that identify the thread.

seq-no
The IFCID sequence number associated with the trace record. The sequence number is printed in hexadecimal format. If the sequence number is zero, then IFCID 207 was not active or it was active with a destination of the resident trace table only. IFCID 207 is a member of statistics class 4, which has a default destination of SMF.

System action

Alert A004 is generated. A trace record whose IFCID=207 is written. Indoubt resolution with the coordinator completes.

System programmer response

Determine the destination of statistics class 4. Locate and print the trace record with SEQUENCE NUMBER='seq-no'. Call the database administrator.

Database Administrator Action: Inform the database administrator at the coordinator 'location' and at the participant 'location' of the problem.

Correcting the damage at the participant is not an easy task. Since the time of the heuristic action, the data that was aborted using manual means might have been used by many applications - read and/or write. Correcting the damage might involve reversing the effects of these applications as well. The following information that is available at Db2 might be helpful in correcting the problem:

- The statistics trace class 4 contains an IFCID 207 trace record. This record contains the RBA of the first Db2 log record written for the logical unit of work whose LUWID is included in this message.
- The DSN1LOGP utility provides a summary report that identifies the table spaces modified by the logical unit of work at the local Db2 as well as any downstream participant locations involved in the logical unit of work. This information, while not directly related to the damage at the participant, might be useful in determining the scope of the problem.
- DISPLAY THREAD TYPE(INDOUBT) displays the RBA of the first Db2 log record written for the logical unit of work whose LUWID is included in this message. This information continues to appear in the DISPLAY THREAD report until it is purged with the RESET INDOUBT command.

Contact your IBM Support Center for further assistance.

DSNL409I **INDOUBT THREAD RESOLUTION WITH COORDINATOR *location* SHOWS HEURISTIC DAMAGE AT PARTICIPANT *location* FOR *luwid=token* - COORDINATOR ABORT VERSUS PARTICIPANT COMMIT. INFORMATION RECORDED IN TRACE RECORD WITH IFCID 207 AND IFCID SEQUENCE NUMBER=*seq-no***

Explanation

Db2 has participant responsibility in the logical unit of work identified by 'luwid=token' for the coordinator at COORDINATOR 'location' and coordination responsibility in the same logical unit of work for the participant at PARTICIPANT 'location'. Heuristic damage occurred.

- The application was told that commit failed.
- Any resources updated at the coordinator and at this Db2 were rolled back.
- Updated resources at the participant were committed.

location
This field contains one of the following:

- The requester's relational database name (location name)
- The requester's VTAM LU name (<luname>)
- The requester's IP address

luwid=token
The global logical unit of work id and the local token that identify the thread.

seq-no
The IFCID sequence number associated with the trace record. The sequence number is printed in hexadecimal format. If the sequence number is zero, then IFCID 207 was not active or it was active with a destination of the resident trace table only. IFCID 207 is a member of statistics class 4, which has a default destination of SMF.

System action

Alert A004 is generated. A trace record whose IFCID=207 is written. Indoubt resolution with the coordinator completes.

System programmer response

Determine the destination of statistics class 4. Locate and print the trace record with SEQUENCE NUMBER='seq-no'. Call the database administrator.

Database Administrator Action: Inform the database administrator at the coordinator 'location' and at the participant 'location' of the problem.

Correcting the damage at the participant is not an easy task. Since the time of the heuristic action, the data that was committed using manual means might have been used by many applications - read and/or write. Correcting the damage might involve reversing the effects of these applications as well. This information is available at Db2 and might be helpful in correcting the problem.

- The statistics trace class 4 contains an IFCID 207 trace record. This record contains the RBA of the first Db2 log record written for the logical unit of work whose LUWID is included in this message.
- The DSN1LOGP utility provides a summary report that identifies the table spaces modified by the logical unit of work at the local Db2 and any downstream participant locations involved in the logical unit of work. This information, while not directly related to the damage at the participant, might be useful in determining the scope of the problem.
- DISPLAY THREAD TYPE(INDOUBT) displays the RBA of the first Db2 log record written for the logical unit of work whose LUWID is included in this message. This information continues to appear in the DISPLAY THREAD report until it is purged with the RESET INDOUBT command.

Contact your IBM support center for further assistance.

DSNL410I **WARM START CONNECTION BY PARTNER *location* REJECTED. PARTNER CHANGED AT LEAST 1 OF - OUR LOG NAME *oldourname(newourname)*, THEIR LOG NAME *oldtheirname(newtheirname)*, PA_SUPPORT *oldpa(newpa)*, FLAG_BYTE_SENT *oldfb(newfb)*, CCLUNAME_SENT *oldccls(newccls)*, AND INDOUBT THREADS REQUIRE RESOLUTION. SEE IFCID=205 TRACE RECORD WITH IFCID SEQUENCE NUMBER=*seq-no*.**

Explanation

An attempt to make a warm start connection with a partner was rejected because the partner specified a different set of sync point parameters than the ones that were in use when communications were lost. Db2 has knowledge of indoubt threads that involve the partner as either the coordinator or a participant. This error might be a recoverable error if the partner can restart with the original sync point parameters. If this is not possible, then the partner must perform a cold start connection with Db2.

location
The 'location' with which the connection failed: either the relational database name (location-name) or the logical unit name (<luname>) of the partner.

oldourname
The log name for this Db2 subsystem. This value is null if the partner did not initiate the log name exchange.

newourname
The log name for this Db2 subsystem, as remembered by our partner and sent to us in the attempted warm start connection. This value is null if the partner did not initiate the log name exchange.

oldtheirname
The log name used by the partner during the last connection, as remembered by Db2.

newtheirname
The log name used by the partner in the attempted warm start connection.

oldpa
The sync point protocol used during the last connection, as remembered by the Db2 (PA - Presumed Abort, PN - Presumed Nothing).

newpa
The sync point protocol used during the last connection, as remembered by the partner (PA - Presumed Abort, PN - Presumed Nothing).

oldfb
The use of the PS header byte 2 during the last connection, as remembered by Db2 (F - used as flag byte, N - not used as flag byte).

newfb
The use of the PS header byte 2 during the last connection, as remembered by the partner (F - used as flag byte, N - not used as flag byte).

oldccls
Whether the luname of the conversation correlator was exchanged as part of the sync point protocol during the last connection, as remembered by Db2. (E - was exchanged, N - was not exchanged).

newccls
Whether the luname of the conversation correlator was exchanged as part of the sync point protocol during the last connection, as remembered by the partner (E - was exchanged, N - was not exchanged).

seq-no
The IFCID sequence number associated with the trace record. The sequence number is printed in hexadecimal format. If the sequence number is zero, then IFCID 0205 was not active or it was active with a destination of the resident trace table only. IFCID 0205 is a member of statistics class 4, which has a default destination of SMF.

System action

The connection with the partner is rejected. Alert A002 is generated. Db2 retains indoubt knowledge.

System programmer response

Call the database administrator.

Database Administrator Action: Contact the database administrator at the partner 'location' and determine if it is possible for the partner to perform a warm start with same sync point parameters as ours ('oldourname', 'oldtheirname', 'oldpa', 'oldfb', 'oldccls'). If this is possible, the next attempt to connect will succeed.

If this cannot be done, then there are two other possible solutions:

- Have the partner 'location' perform a cold start connection with this Db2 subsystem.
- Use the RESET INDOUBT command with the FORCE option in conjunction with the LOCATION parameter to cause the next connection with the partner to be a cold start connection.

DSNL411E **COLD START CONNECTION BY COORDINATOR *location* ACCEPTED. INDOUBT THREADS NEED MANUAL RESOLUTION. INFORMATION RECORDED IN TRACE RECORD WITH IFCID=204 AND IFCID SEQUENCE NUMBER=*seq-no***

Explanation

Db2 has participant responsibility for indoubt threads. The coordinator informed Db2 that it performed a cold start operation and lost all knowledge of indoubt threads. The indoubt threads at this Db2 must be manually resolved with the RECOVER INDOUBT command.

location
This field contains one of the following:

- The requester's relational database name (location name)
- The requester's VTAM LU name (<luname>)
- The requester's IP address

seq-no
The IFCID sequence number associated with the trace record. The sequence number is printed in hexadecimal format. If the sequence number is zero, then IFCID 204 was not active or it was active with a destination of the resident trace table only. IFCID 204 is a member of statistics class 4, which has a default destination of SMF.

This condition can falsely occur if the DDF communications database (CDB) contains definitions that allow a subsystem to remotely access itself through SNA. To avoid this false condition, remove self-referencing CDB definitions.

System action

The connection with the partner is accepted. Alert A001 is generated. A trace record whose IFCID=204 is written.

System programmer response

Call the database administrator.

Database Administrator Action: Db2 is a participant with one or more indoubt threads where the coordinator is 'location'. The DBMS at 'location' performed a cold start. The Db2 participant assumes that the coordinator recovery log was lost or damaged and indoubt thread resolution cannot be achieved. There is probably inconsistent data at the coordinator. A list of indoubt threads involving the coordinator 'location' can be displayed using the DISPLAY THREAD command for indoubt type threads by including the LOCATION('location') parameter in the command.

The heuristic decision (that is, to commit or abort the logical unit of work) should be coordinated with any other participants. The existence of other participants might not be easy to determine. The information might be available in the coordinators recovery log even though the coordinator performed a cold start. If the coordinator is a Db2, then it might be possible to execute the DSN1LOGP utility to produce a summary report. If this is possible, the following information might be produced:

- The LUWID of the thread.
- The NID used by IMS or CICS to identify the thread.
- The name of all participants.
- The name of an upstream coordinator if the coordinator is also a participant. This could happen when an application requester accesses a Db2 AS using application-directed access, which in turn accesses another Db2 server with system-directed access. (The local Db2 might be the third system in this scenario.)

At this Db2 participant, all indoubt threads coordinated by the cold starting location must be resolved with the RECOVER INDOUBT command. Locked data remains unavailable until resolution. Threads that were already resolved with this command are discarded. Threads not yet resolved are discarded after resolution with the command.

The commit or abort decision provided using the RECOVER INDOUBT command for a logical unit of

work are propagated to all downstream participants, if any.

DSNL412I PROTOCOL ERROR DETECTED IN SYNCPOINT REQUEST/RESPONSE FROM COORDINATOR *location* LUWID=*luwid=token*. INFORMATION RECORDED IN TRACE RECORD WITH IFCID=208 AND IFCID SEQUENCE NUMBER=*seq-no*

Explanation

Db2 is a participant in the logical unit of work identified by 'luwid=token'. A protocol error occurred during the SNA sync point exchange with the coordinator identified by 'location'. The protocol error fits into one of the following categories:

- An unknown SNA PS header was received.
- An SNA PS header was received in the wrong sequence.
- An invalid LU6.2 verb sequence was used to deliver the SNA PS header.
- A DEALLOCATE TYPE(ABEND_SVC) was received from the coordinator, indicating that the coordinator detected a protocol violation in the PS headers transmitted by Db2.

location
Either the relational database name (location-name) or the logical unit name (<luname>) of the coordinator.

luwid=token
The global logical unit of work id and the local token that identify the thread.

seq-no
The IFCID sequence number associated with the trace record. The sequence number is printed in hexadecimal format. If the sequence number is zero, IFCID 208 was not active or it was active with a destination of the resident trace table only. IFCID 208 is a member of statistics class 4, which has a default destination of SMF.

If the protocol error was detected before the commit decision, the unit of work at the Db2 system might be indoubt. Db2 does not automatically resolve such an indoubt thread.

If the protocol error was detected after the commit decision, the unit of work either completed commit or abort processing.

System action

Alert A005 is generated. A trace record whose IFCID=208 is written.

System programmer response

This is an APARable error, probably at the coordinator, but possibly at Db2. The Db2 documentation required is contained in the statistics class 4 trace record. Determine the destination of statistics class 4. Locate and print the trace record with SEQUENCE NUMBER='seq-no'.

The database administrator might need to manually resolve the indoubt thread.

Database Administrator Action: Determine if the 'luwid' is indoubt by using the DISPLAY THREAD command for type indoubt threads and including the LUWID('token') parameter in the command. If the thread is indoubt, it must be manually resolved using the RECOVER INDOUBT command. The commit or abort decision made at the coordinator must be determined so that the same decision can be made at Db2.

Contact the database administrator at the coordinator location to determine whether the thread with LUWID=luwid committed or aborted.

If the coordinator system is another Db2, then the following steps can be taken at the Db2 coordinator to determine the commit or abort decision.

1. If the coordinator Db2 system is running and a Db2 conditional restart was not performed since the error was detected at this (the participant) location, ask the database administrator at the Db2 coordinator location to issue one of the following DISPLAY THREAD TYPE(INDOUBT) commands:
   - A -DISPLAY THREAD TYPE(INDOUBT), using the LOCATION keyword and specifying the location name of the local Db2.
   - A -DISPLAY THREAD TYPE(INDOUBT) LUWID(luwid)

   If a thread with LUWID=luwid appears in the display, then the display also includes the commit or abort decision. If no thread with LUWID=luwid appears in the display, then the thread was aborted.
2. If the Db2 coordinator is down or if a conditional restart was performed there, ask the database administrator at the Db2 coordinator to run DSN1LOGP, specifying SUMMARY(ONLY) FILTER LUWID(luwid). The output from DSN1LOGP includes the commit or abort decision.

DSNL413I PROTOCOL ERROR DETECTED IN SYNCPOINT REQUEST/RESPONSE FROM PARTICIPANT *location* LUWID=*luwid=token*. INFORMATION RECORDED IN TRACE RECORD WITH IFCID=208

AND IFCID SEQUENCE NUMBER=*seq-no*

Explanation

Db2 is the coordinator of the logical unit of work identified by 'luwid=token'. A protocol error occurred during the SNA sync point exchange with the participant identified by 'location'. The protocol error fits into one of the following categories:

- An unknown SNA PS header was received.
- An SNA PS header was received in the wrong sequence.
- An invalid LU6.2 verb sequence was used to deliver the SNA PS header.
- A DEALLOCATE TYPE(ABEND_SVC) was received from the participant, indicating that the participant detected a protocol violation in the PS headers transmitted by Db2.

location
The relational database name (location-name) of the participant.

luwid=token
The global logical unit of work id and the local token that identify the thread.

seq-no
The IFCID sequence number associated with the trace record. The sequence number is printed in hexadecimal format. If the sequence number is zero, IFCID 208 was not active or it was active with a destination of the resident trace table only. IFCID 208 is a member of statistics class 4, which has a default destination of SMF.

If the protocol error is detected before the commit decision, the unit of work is backed out.

If the protocol error is detected after the commit decision, the outcome of the unit of work is unchanged. In this case, the remote participant might be indoubt. Db2 does not automatically resolve the indoubt thread with the partner 'location' after a protocol error is detected.

System action

Alert A005 is generated. A trace record whose IFCID=208 is written.

System programmer response

This is an APARable error, probably at the participant, but possibly at the Db2 coordinator. The Db2 documentation required is contained in the statistics class 4 trace record. Determine the destination of statistics class 4. Locate and print the trace record with SEQUENCE NUMBER='seq-no'.

Call the database administrator. The participant might need to manually resolve the indoubt thread.

Database Administrator Action: The Db2 coordinator does not know the status of the thread at the participant. The Db2 coordinator assumes that it is indoubt and maintains knowledge of the indoubt participant until it is purged with the RESET INDOUBT command. If the thread is indoubt at the participant, it must be resolved using manual (heuristic) means. The status of the thread at the local Db2 (the coordinator) can be determined with the DISPLAY THREAD command for type indoubt threads by including the LUWID('token') parameter in the command.

If the 'participant' location is also a Db2, the RECOVER INDOUBT command can be used at the participant to resolve the indoubt thread.

DSNL414E **PROTOCOL ERROR DURING INDOUBT THREAD RESOLUTION WITH PARTICIPANT *location* LUWID=*luwid=token* INFORMATION RECORDED IN TRACE RECORD WITH IFCID=206 AND IFCID SEQUENCE NUMBER=*seq-no***

Explanation

Db2 has coordinator responsibility for the logical unit of work identified by 'luwid=token'. The Db2 thread associated with the logical unit of work is either committed or aborted. A protocol error occurred during indoubt resolution with the participant identified by 'location'.

The thread at the participant remains indoubt. Db2 rejects further attempts to automatically resolve the indoubt thread.

location
The relational database name (location-name) of the participant.

luwid=token
The global logical unit of work id and the local token that identify the thread.

seq-no
The IFCID sequence number associated with the trace record. The sequence number is printed in hexadecimal format. If the sequence number is zero, IFCID 206 was not active or it was active with a destination of the resident trace table only. IFCID 206 is a member of statistics class 4, which has a default destination of SMF.

System action

Alert A003 is generated. A trace record whose IFCID=206 is written.

System programmer response

This is an APARable error, probably at the participant, but possibly at the Db2 coordinator. The Db2 documentation required is contained in the statistics class 4 trace record. Determine the destination of statistics class 4. Locate and print the trace record with SEQUENCE NUMBER='seq-no'.

Call the database administrator. The participant might need to manually resolve the indoubt thread.

Database Administrator Action: The Db2 coordinator maintains knowledge of the indoubt participant until it is purged with the RESET INDOUBT command. If the thread is indoubt at the participant, it must be manually (heuristically) resolved. The status of the thread at the local Db2 (the coordinator) can be determined with the DISPLAY THREAD command for type indoubt threads by including the LUWID('token') parameter in the command.

If the participant is another Db2, the RECOVER INDOUBT command can be used to resolve the indoubt thread.

DSNL415I AUTOMATIC RESOLUTION OF *luwid=token* WITH COORDINATOR *location* RESULTED IN ABORT

Explanation

The identified indoubt logical unit of work was automatically resolved by communication with the coordinator location. After automatic resolution, this message is issued if message DSNL405 was previously issued to report the thread as indoubt. This message is not issued if message DSNL405 occurs in one restart of DDF or Db2, and automatic resolution occurs in a different restart of DDF or Db2.

luwid=token
The global logical unit of work id and the local token that identify the thread

location
This field contains one of the following:

- The requester's relational database name (location name)
- The requester's VTAM LU name (<luname>)
- The requester's IP address

System action

Processing continues normally.

DSNL416I COLD START CONNECTION REJECTED BY PARTNER *location*

Explanation

Db2 attempted to make a cold-start connection with a partner location. The partner rejected this attempted connection. Db2 never rejects cold-start connections by partners.

location
Either the relational database name (location-name) or the logical unit name (<luname>) of the partner.

System action

The connection was not made.

System programmer response

Call the database administrator.

Database Administrator Action: Db2 is not able to connect the partner 'location' until the partner 'location' allows a cold-start connection with Db2. Contact the database administrator at the partner 'location'.

Contact IBM Support for further assistance.

DSNL417E *csect-name* COLD START DETECTED AT COORDINATOR LOCATION *location* FOR INDOUBT THREAD WITH *luwid=token*. MANUAL RESOLUTION IS REQUIRED. INFORMATION RECORDED IN TRACE RECORD WITH IFCID=204 and IFC SEQUENCE NUMBER=*seq-no*.

Explanation

Db2 has resync responsibility for the indoubt thread identified. The partner location informed Db2 that it had performed a cold start operation and lost all knowledge of this indoubt thread. This indoubt thread must be manually resolved with the RECOVER INDOUBT command, followed by the RESET INDOUBT command.

location
This field contains one of the following:

- The requester's relational database name (location name)
- The requester's VTAM LU name (<luname>)
- The requester's IP address

luwid=token
The logical unit of work id and the local token that identify the thread.

seq-no
The IFCID sequence number associated with the trace record. The sequence number is printed in hexadecimal format. If the sequence number is zero, then IFCID 204 was not active or it was active with a destination of the resident trace table only. IFCID 204 is a member of statistics class 4, which has a default destination of SMF and contains information about a partner's cold start.

System action

Alert A001 is generated. A trace record whose IFCID=204 is written.

System programmer response

Call the database administrator.

Database Administrator Action: Db2 is a participant with one or more indoubt threads where the coordinator is 'location'. The DBMS at 'location' performed a cold start. The Db2 participant assumes that the coordinator recovery log was lost or damaged and indoubt thread resolution cannot be achieved. There may be inconsistent data at the coordinator. A list of indoubt threads involving the coordinator 'location' can be displayed using the DISPLAY THREAD command for indoubt type threads by including the LOCATION('location') parameter in the command.

The heuristic decision (that is, to commit or abort the logical unit of work) should be coordinated with any other participants. The existence of other participants might not be easy to determine. The information might be available in the coordinators recovery log even though the coordinator performed a cold start. If the coordinator is a Db2, then it might be possible to execute the DSN1LOGP utility to produce a summary report. If this is possible, the following information might be produced:

- The LUWID of the thread.
- The NID used by IMS or CICS to identify the thread.
- The name of all participants.
- The name of an upstream coordinator if the coordinator is also a participant. This could happen when an application requester accesses a Db2 AS using application-directed access, which in turn accesses another Db2 server with system-directed access. (The local Db2 might be the third system in this scenario.)

At this Db2 participant, all indoubt threads coordinated by the cold starting location must be resolved with the RECOVER INDOUBT command. Locked data remains unavailable until resolution. Threads that were already resolved with this command are discarded. Threads not yet resolved are discarded after resolution with the command.

The commit or abort decision provided using the RECOVER INDOUBT command for a logical unit of work are propagated to all downstream participants, if any.

DSNL418E ***csect-name*** **COLD START DETECTED AT PARTICIPANT LOCATION** ***location*** **FOR INDOUBT THREAD WITH** ***luwid=token*****. POSSIBLE DAMAGE. INFORMATION RECORDED IN TRACE RECORD WITH IFCID=204 and IFC SEQUENCE NUMBER=*****seq-no*****.**

Explanation

Db2 has coordinator responsibility for the indoubt thread identified. The partner location informed Db2 that it had performed a cold start operation and lost all knowledge of this indoubt thread. There might be damage at the participant.

location
This field contains one of the following:

- The requester's relational database name (location name)
- The requester's VTAM LU name (<luname>)
- The requester's IP address

luwid=token
The global logical unit of work id and the local token that identify the thread.

seq-no
The IFCID sequence number associated with the trace record. The sequence number is printed in hexadecimal format. If the sequence number is zero, then IFCID 204 was not active or it was active with a destination of the resident trace table only. IFCID 204 is a member of statistics class 4, which has a default destination of SMF.

System action

Alert A001 is generated. A trace record whose IFCID=204 is written.

System programmer response

Call the database administrator.

Database Administrator Action: Db2 is the coordinator with indoubt thread resolution responsibility for one or more indoubt logical units of work at 'location'. The DBMS at 'location' performed a cold start. Db2 assumes that the participant recovery

log was lost or damaged and indoubt thread resolution cannot be achieved. There is probably inconsistent data at the participant. Minimally, the participant might not completely reflect the final outcome of the threads that were indoubt at the time the failure occurred. A list of indoubt threads involving the partner 'location' can be displayed using the DISPLAY THREAD command for type indoubt threads by including the LOCATION('location) parameter in the command.

Information about the indoubt participant continues to appear in the DISPLAY THREAD TYPE(INDOUBT) report until it is purged with the RESET INDOUBT command.

DSNL419I **PARTNER *location* HAS RESOLVED WARM START STATUS AND CONNECTION IS ACCEPTED**

Explanation

A successful warm start connection was made with a partner. A previous attempt to make a warm start connection with the partner was rejected with a DSNL410I message because the partner specified an incorrect log name.

location
Either the relational database name (location-name) or the logical unit name (<luname>) of the partner

System action

The connection was successful. Normal processing continues.

DSNL420I **COLD START CONNECTION BY PARTICIPANT *location* ACCEPTED. POSSIBLE DAMAGE. INFORMATION RECORDED IN TRACE RECORD WITH IFCID=204 AND IFCID SEQUENCE NUMBER=*seq-no***

Explanation

Db2 has coordinator responsibility for indoubt threads at a participant and just connected with the participant, which lost all knowledge of indoubt threads because of a previous cold start. There might be damage at the participant.

location
This field contains one of the following:

- The requester's relational database name (location name)
- The requester's VTAM LU name (<luname>)
- The requester's IP address

seq-no
The IFCID sequence number associated with the trace record. The sequence number is printed in hexadecimal format. If the sequence number is zero, then IFCID 204 was not active or it was active with a destination of the resident trace table only. IFCID 204 is a member of statistics class 4, which has a default destination of SMF.

System action

The connection with the partner is accepted. Alert A001 is generated. A trace record whose IFCID=204 is written.

System programmer response

Call the database administrator.

Database Administrator Action: Db2 is the coordinator with indoubt thread resolution responsibility for one or more indoubt logical units of work at 'location'. The DBMS at 'location' performed a cold start. Db2 assumes that the participant recovery log was lost or damaged and indoubt thread resolution cannot be achieved. There is probably inconsistent data at the participant. Minimally, the participant might not completely reflect the final outcome of the threads that were indoubt at the time the failure occurred. A list of indoubt threads involving the partner 'location' can be displayed using the DISPLAY THREAD command for type indoubt threads by including the LOCATION('location) parameter in the command.

Information about the indoubt participant continues to appear in the DISPLAY THREAD TYPE(INDOUBT) report until it is purged with the RESET INDOUBT command.

DSNL421I **SNA XLN PROTOCOL VIOLATION BY PARTNER *location*. INFORMATION RECORDED IN TRACE RECORD WITH IFCID=0236 AND IFCID SEQUENCE NUMBER=*seq-no***

Explanation

Db2 detected a protocol violation in the SNA Exchange Log Names (XLN) exchange with the partner at the specified location.

location
Either the relational database name (location-name) or the logical unit name (<luname>) of the partner that sent the invalid XLN message.

seq-no
The IFCID sequence number associated with the trace record. The sequence number is printed in

hexadecimal format. If the sequence number is zero, then IFCID 0236 was not active or it was active with a destination of the resident trace table only. IFCID 0236 is a member of statistics class 4, which has a default destination of SMF.

System action

The attempt to connect with the remote site fails. Db2 writes a trace record with IFCID 0236.

Operator response

Call the system programmer.

System programmer response

Contact the system programmer for the remote site. The invalid XLN message is recorded in the IFCID 0236 trace record. The system logic error that causes the invalid XLN message must be corrected at the remote site.

DSNL422I WARM START CONNECTION BY PARTNER *location* REJECTED BECAUSE THE PARTNER REMEMBERS OUR LOG NAME INCORRECTLY. OUR LOG NAME IS *name1* AND THE PARTNER REMEMBERS IT AS *name2*

Explanation

An attempt to make a warm start connection with a partner was rejected because the partner specified our log name as name2. Our log name is name1, which is the LUNAME of the local Db2. This error might be a recoverable error if the partner can restart with our log name as name1. If this is not possible, then the partner must perform a cold start connection with Db2.

location
The 'location' with which the connection failed: either the relational database name (location-name) or the logical unit name (<luname>) of the partner.

name1
Our log name, as remembered by us.

name2
Our log name, as remembered by our partner and sent to us in the attempted warm start connection.

System action

The connection with the partner is rejected. Db2 retains indoubt knowledge.

System programmer response

Call the database administrator.

Database Administrator Action: Contact the database administrator at the partner 'location' and determine if it is possible for the partner to perform a warm start with our log name specified as the LUNAME of this Db2. If this is possible, the next attempt to connect will succeed.

If this cannot be done, then there are two other possible solutions.

- Have the partner 'location' perform a cold start connection with this Db2 subsystem.
- Use the RESET INDOUBT command with the FORCE option in conjunction with the LOCATION parameter to cause the next connection with the partner to be a cold start connection.

DSNL423I AUTOMATIC RESOLUTION OF *luwid=token* WITH PARTICIPANT *location* RESULTED IN COMMIT

Explanation

The identified indoubt logical unit of work was automatically resolved through communication with the participant location. After automatic resolution, this message is issued if message DSNL406 was previously issued reporting the thread as indoubt. This message is not issued if message DSNL406 occurs in one restart of DDF or Db2, and automatic resolution occurs in a different restart of DDF or Db2.

luwid=token
The global logical unit of work id and the local token that identify the thread.

location
This field contains one of the following:

- The requester's relational database name (location name)
- The requester's VTAM LU name (<luname>)
- The requester's IP address

System action

Processing continues normally.

DSNL424I AUTOMATIC RESOLUTION OF *luwid=token* WITH PARTICIPANT *location* RESULTED IN ABORT

Explanation

The identified indoubt logical unit of work was automatically resolved by communication with the participant location. After automatic resolution, this message is issued if message DSNL425 was previously

issued reporting the thread as being indoubt. This message is not issued if message DSNL425 occurs in one restart of DDF or Db2, and automatic resolution occurs in a different restart of DDF or Db2.

luwid=token
The global logical unit of work id and the local token that identify the thread

location
This field contains one of the following:

- The requester's relational database name (location name)
- The requester's VTAM LU name (<luname>)
- The requester's IP address

System action

Processing continues normally.

DSNL425I **THREAD *luwid=token* AT PARTICIPANT *location* MAY BE INDOUBT BECAUSE OF A COMMUNICATION FAILURE. DB2 ABORTED THE THREAD. INFORMATION RECORDED IN TRACE RECORD WITH IFCID=209 AND IFCID SEQUENCE NUMBER=*seq-no***

Explanation

During execution of the two phase commit protocol with the participant identified by 'location', communications failed. Phase 1 of the protocol completed with the participant and it is prepared for either commit or abort. The decision to abort the thread was made, but cannot be communicated to the participant at this time. The participant is indoubt.

Db2 becomes responsible for indoubt resolution with the participant. This responsibility appears in a DISPLAY THREAD TYPE (INDOUBT) report. Periodic attempts are made to reestablish communication with the participant for automatic indoubt resolution. If successful, message DSNL424 is written.

luwid=token
The global logical unit of work id and the local token that identify the thread.

location
This field contains one of the following:

- The requester's relational database name (location name)
- The requester's VTAM LU name (<luname>)
- The requester's IP address

seq-no
The IFCID sequence number associated with the trace record. The sequence number is printed in hexadecimal format. If the sequence number is zero, IFCID 209 was not active or it was active with a destination of the resident trace table only. IFCID 209 is a member of statistics class 4, which has a default destination of SMF.

System action

Alert A006 is generated. A trace record whose IFCID=209 is written.

Operator response

If message DSNL424 for the LUWID specified in message DSNL406 does not appear in a reasonable amount of time, call the system programmer.

System programmer response

Determine the cause of the communication failure and have the problem fixed. Db2 periodically attempts to reestablish communication. If the problem cannot be fixed in a reasonable amount of time, call the database administrator. The participant might need to resolve the indoubt state manually in order to release locked resources.

Database Administrator Action: If the unit of work with LUWID=luwid is indoubt at 'location', inform the database administrator there that the logical unit of work with LUWID=luwid was aborted to assist in manual resolution of the indoubt thread at 'location'.

DSNL429I **INCONSISTENT DDF LOG DATA, THE FIRST CONNECTION WITH EACH REMOTE LOCATION WILL BE A COLD START CONNECTION**

Explanation

Db2 detected an inconsistency in the Db2 log during restart operations. Since the log is inconsistent and cannot be trusted, Db2 performs a cold start connection with each partner LU the next time a connection with that LU is attempted. If Db2 has indoubt resolution responsibility either as a coordinator or as a participant, then this information is lost as indicated by messages DSNL438 and/or DSNL439, which might follow this message. This means that:

- All information that Db2 maintained about having coordinator responsibility for remote participants was purged. These remote participants need manual resolution for any indoubt threads for which Db2 was the coordinator. A DSNL439I message is displayed for each indoubt remote participant.

- All information that Db2 maintained about having participant responsibility for remote coordinators was purged. A DSNL438I message is displayed for each database access thread that has a remote coordinator. If a database access thread remains indoubt at the end of restart, then the thread must be manually resolved. A -DISPLAY THREAD (*) TYPE(INDOUBT) LOCATION (*) command provides a report that lists the indoubt threads that need manual resolution.

System action

Processing continues normally.

System programmer response

Call the database administrator.

Database Administrator Action: See the DSNL438I and DSNL439I messages to determine what action to take.

DSNL432I DDF IS COORDINATOR FOR *nnnn* THREADS WITH *mmmm* INDOUBT REMOTE PARTNERS

Explanation

This message is issued when DDF is started or stopped, if DDF determines that this Db2 has coordinator responsibility for one or more indoubt threads with one or more partners. This is a summary status message.

nnnn
The number of indoubt threads for which Db2 is the coordinator

mmmm
The number of remote partners where the threads are indoubt

System action

Processing continues normally.

Operator response

If the message was issued as a result of DDF starting, no action is necessary. If the message was issued as a result of DDF stopping, contact the database administrator.

Database Administrator Action: If the message was issued as a result of stopping DDF, then Db2 maintained all information necessary to perform automatic resynchronization with partner locations and resolve all indoubt units of work. Issue the START DDF command to initiate this process.

If the message was issued as a result of starting DDF, then DDF started automatic resynchronization.

DSNL433I DDF IS PARTICIPANT FOR *nnnn* INDOUBT THREADS WITH *mmmm* REMOTE PARTNERS

Explanation

This message is issued when DDF is started or stopped, if DDF determines that this Db2 has participant responsibility for one or more indoubt threads with one or more partners. This is a summary status message.

nnnn
The number of indoubt threads for which Db2 is the participant

mmmm
The number of remote partners that have coordinator responsibility

System action

Processing continues normally.

Operator response

If the message was issued as a result of DDF starting, no action is necessary. If the message was issued as a result of DDF stopping, contact the database administrator.

Database Administrator Action: If the message was issued as a result of stopping DDF, then Db2 maintained all information necessary to perform automatic resynchronization with partner locations and resolve all indoubt units of work. Issue the START DDF command to initiate this process.

If you do not want to perform automatic resynchronization, you can still resolve the indoubt units of work for which Db2 is a participant and which hold database resources locked. Use the DISPLAY THREAD command for type indoubt threads to produce a display that lists these threads. Then use the RECOVER INDOUBT command to either commit or abort these units of work.

To avoid data inconsistency, coordinate this manual resolution with the database administrators at the locations that have coordinator responsibility for each indoubt unit of work. If any of the indoubt units of work at Db2 also have coordinator responsibility for participant locations, then you should notify the database administrators at the participant locations of the commit or abort decision so they can make the same decision.

DSNL434E DDF NOT STARTED - INCORRECT VTAM RELEASE LEVEL

Explanation

The local VTAM release level is older than the minimum release level required by Db2. When Db2 issues the VTAM OPEN macro, the VTAM release level is returned to Db2. Db2 examines the VTAM release level to determine whether the local VTAM system provides the function required by Db2.

System action

The attempt to START DDF fails.

Operator response

Call the system programmer.

System programmer response

Install a release of VTAM that is compatible with the Db2 system. The Db2 Program Directory identifies the required VTAM release level.

DSNL438I **RESYNC STATUS PURGED FOR COORDINATOR *location*. LUWID=*luwid*, URID=*urid*, STATUS=*s* INFORMATION RECORDED IN TRACE RECORD WITH IFCID=235 and IFCID SEQUENCE NUMBER=*seq-no***

Explanation

The information related to resynchronization with the remote coordinator location for the logical unit of work identified by 'luwid', which is displayed in this message, is being purged by Db2. Automatic indoubt resolution responsibility for this distributed logical unit of work can no longer be performed.

This situation can arise in one of two ways;

- A Db2 conditional restart (other than a Db2 cold start; that is, a Db2 conditional restart with STARTRBA=ENDRBA) is being performed.
- An inconsistency in the Db2 log was detected during Db2 restart processing (indicated by a DSNL429I message).

location
This field contains one of the following:

- The requester's relational database name (location name)
- The requester's VTAM LU name (<luname>)
- The requester's IP address

luwid
The global logical unit of work id that identifies the logical unit of work.

urid
The unit of recovery identifier. This is the RBA on the Db2 recovery log of the log record that marks the beginning of the logical unit of work. This is the earliest RBA required to process the logical unit of work during restart.

s
Restart status of the logical unit of work. When Db2 came down, the logical unit of work was in one of these states:

A
INABORT: The logical unit of work was in the "must-complete" phase of abort, but abort has not yet completed.

C
INCOMMIT: The logical unit of work was in the "must-complete" phase of commit, but commit has not yet completed.

D
INDOUBT: The logical unit of work completed the first phase of commit, but Db2 has not yet received the commit or abort decision from the coordinator.

F
INFLIGHT: The logical unit of work has not yet completed the first phase of commit and should be backed out.

U
UNKNOWN: The status of the logical unit of work is not known to Db2 because of conditional restart.

seq-no
The IFCID sequence number associated with the trace record. The trace record is written to statistics class 4, which is started to SMF as a default during Db2 installation. Statistics class 4 must be started to a permanent destination (SMF or GTF) for the trace record to be accessible. The sequence number is printed in hexadecimal.

System action

Processing continues normally.

System programmer response

Call the database administrator.

Database Administrator Action: The resynchronization information that was purged by Db2 is recorded in this message. To determine the proper commit or abort decision made by the coordinator at 'location', use the status code as follows:

A
The correct decision is to abort the logical unit of work.

C
The correct decision is to commit the logical unit of work.

D
Contact the database administrator at 'location' to determine the correct decision.

F
The correct decision is to abort the logical unit of work.

U
Contact the database administrator at 'location' to determine the correct decision.

DSNL439I RESYNC STATUS PURGED FOR PARTICIPANT *location*. LUWID=*luwid*, URID=*urid*, STATUS=*s* INFORMATION RECORDED IN TRACE RECORD WITH IFCID=235 and IFCID SEQUENCE NUMBER=*seq-no*

Explanation

Db2 is purging the information related to resynchronization with the remote participant location for the logical unit of work identified by 'luwid', which is displayed in this message. Automatic indoubt resolution responsibility for this distributed logical unit of work can no longer be performed.

This situation can arise in one of two ways:

- A Db2 conditional restart (other than a Db2 cold start; that is, a Db2 conditional restart with STARTRBA=ENDRBA) is being performed.
- An inconsistency in the Db2 log was detected during Db2 restart processing (indicated by a DSNL429I message).

location
This field contains one of the following:

- The requester's relational database name (location name)
- The requester's VTAM LU name (<luname>)
- The requester's IP address

luwid
The global logical unit of work id that identifies the logical unit of work.

urid
The unit of recovery identifier. This is the RBA on the Db2 recovery log of the log record that marks the beginning of the logical unit of work. This is the earliest RBA required to process the logical unit of work during restart.

s
Restart status of the logical unit of work. When Db2 came down, the logical unit of work was in one of these states:

A
INABORT: The logical unit of work was in the "must-complete" phase of abort, but abort has not yet completed.

C
INCOMMIT: The logical unit of work was in the "must-complete" phase of commit, but commit has not yet completed.

D
INDOUBT: The logical unit of work completed the first phase of commit, but Db2 has not yet received the commit or abort decision from the coordinator.

F
INFLIGHT: The logical unit of work has not yet completed the first phase of commit and should be backed out.

U
UNKNOWN: The status of the logical unit of work is not known to Db2 because of conditional restart.

seq-no
The IFCID sequence number associated with the trace record. The trace record is written to statistics class 4, which is started to SMF as a default during Db2 installation. Statistics class 4 must be started to a permanent destination (SMF or GTF) for the trace record to be accessible. The sequence number is printed in hexadecimal.

System action

Processing continues normally.

System programmer response

Call the database administrator.

Database Administrator Action: The resynchronization information that was purged by Db2 is recorded in this message. When communicating the proper commit or abort decision to the database administrator at 'location', use the status code as follows:

A
Abort the logical unit of work.

C
Commit the logical unit of work.

D
See the DSNL438I message produced for the same 'luwid' and 'urid' to determine the

coordinator 'location'. Contact the database administrator at 'location' to determine the correct decision.

F
Abort the logical unit of work.

U
If there is a DSNL438I message for the same 'luwid' and 'urid', proceed as described above under 'D'. Otherwise, there might be information available on the Db2 log that a DSN1LOGP summary report can provide. If this is not successful, contact IBM Support.

DSNL440I ***csect-name*** **RESET INDOUBT COMMAND SPECIFICATION IN ERROR**

Explanation

A RESET INDOUBT command was issued, but the specification of keywords or keyword parameter values was in error.

System action

No indoubt information was purged. System processing continues normally.

User response

One of the following errors was made in the RESET INDOUBT command specification:

- RESET INDOUBT was issued without any other keywords specified. At least one of the following keywords must also be specified: LUNAME, IPADDR, LOCATION, or LUWID.
- RESET INDOUBT was issued with both the LUWID and LOCATION keywords specified, but a list of LOCATION keyword parameter values was specified. When both the LUWID and LOCATION keywords are specified only one LOCATION keyword parameter value is allowed.
- RESET INDOUBT was issued with at least one LOCATION keyword parameter value that began with a '<', but did not end with a '>', or the length of the bracketed value was not 1 to 8 characters. When the LOCATION keyword parameter value is specified in the <luname> format, the luname value must be bracketed with '<' and '>' and be 1 to 8 characters long.
- RESET INDOUBT was issued with an invalid IPADDR keyword parameter. Verify that the specified IPADDRs are in the proper form, that there is a double period delimiter (..) between the IPADDR and port, and that the port number is valid.

If needed, issue the DISPLAY THREAD TYPE(INDOUBT) command to display information (including LOCATION, LUWID, and LUNAME values) about all indoubt threads. Correct the RESET INDOUBT command specification, and reissue the command.

DSNL441I **KEYWORD 'LUWID' PARAMETER VALUE** ***parmvalue*** **FORMAT IN ERROR**

Explanation

A RESET INDOUBT command with the LUWID parameter was issued, but the specified parameter value (parmvalue) has an invalid format for an LUWID. There are two correct formats for the LUWID parameter. The first correct format is called a token, and is a 1 to 5 digit decimal number. The second correct format is 'netid.luname.luwunique.comseq', where:

netid
A 1 to 8 character network ID

luname
A 1 to 8 character luname

luwunique
A 12 character hexadecimal number

comseq
A 4 character hexadecimal number

All fields in the second correct format must be separated by a period (.) delimiter.

System action

Indoubt information about the specified logical unit of work is not purged from the system.

User response

To determine the correct LUWID value for the unit of work indoubt information that you want to purge, issue the DISPLAY THREAD TYPE(INDOUBT) command to display all units of work for which indoubt information exists. Then reissue the RESET INDOUBT command, specifying the correct LUWID parameter value.

DSNL442I **QUALIFYING INDOUBT INFORMATION FOR LOCATION** ***location*** **NOT FOUND**

Explanation

A -RESET INDOUBT LOCATION('location') command was issued, but Db2 has no indoubt information about the specified location.

location
The value specified after the LOCATION keyword in the RESET INDOUBT command.

System action

No indoubt information was purged. System processing continues normally.

User response

Use the -DISPLAY THREAD(*) TYPE(INDOUBT) LOCATION(*) command to list the locations for which Db2 has indoubt information. After determining the correct location, reissue the command.

DSNL443I QUALIFYING INDOUBT INFORMATION FOR LUWID=*value* NOT FOUND

Explanation

A -RESET INDOUBT LUWID('value') command was issued where 'value' is either an luwid or the local token that represents an luwid. Either Db2 has no indoubt information about the specified luwid or token, or Db2 has indoubt information that cannot be purged using the -RESET INDOUBT command with the LUWID option.

value
The global logical unit of work id or the local token that was specified for the LUWID keyword in the RESET INDOUBT command.

System action

No indoubt information was purged. System processing continues normally.

User response

Use the -DISPLAY THREAD(*) TYPE(INDOUBT) LOCATION(*) command to list the indoubt information known to Db2. If the -DISPLAY THREAD output does not include information about the specified luwid, then that is the reason the message was issued. If the -DISPLAY THREAD output does include information about the specified luwid, this information cannot be purged using the -RESET INDOUBT command with the LUWID option. Refer to the description of each message produced by the -DISPLAY THREAD output that relates to the specified luwid in order to determine how to proceed. After determining the correct luwid or token, reissue the command.

DSNL444I QUALIFYING INDOUBT INFORMATION FOR LOCATION *location* HAS BEEN PURGED

Explanation

A -RESET INDOUBT LOCATION('location') command issued to purge indoubt information about the named location completed successfully and the indoubt information was purged.

location
Either the relational database name (location-name) or the logical unit name (<luname>) that was specified after the LOCATION keyword on the RESET INDOUBT command.

System action

The specified indoubt information was purged. System processing continues normally.

DSNL445I QUALIFYING INDOUBT INFORMATION FOR LUWID *value* HAS BEEN PURGED

Explanation

A -RESET INDOUBT LUWID('value') command, which was issued to purge indoubt information about the specified luwid, completed successfully. The indoubt information was purged.

value
The value specified for the LUWID keyword in the -RESET INDOUBT LUWID(value) command that is being processed.

System action

System processing continues normally.

DSNL446I COLD START WILL BE PERFORMED WITH *nettype netvalue*

Explanation

A -RESET INDOUBT LUNAME('luname') FORCE or a -RESET INDOUBT IPADDR('ipaddr') FORCE command issued to force a cold start completed successfully. The next connection with 'luname' or 'ipaddr' is a cold start.

nettype
Identifies the type of network used to access the remote site. There are two possible values:

LU --
indicates that VTAM is used to connect to the remote site.

IPADDR --
indicates that TCP/IP is used to connect to the remote site.

netvalue
The network address of the remote location. *netvalue* can be blank.

- If *nettype* is LU, *netvalue* specifies the VTAM LU name of the remote location.
- If *nettype* is IPADDR, *netvalue* specifies the IP address of the remote location.

System action

System processing continues normally.

DSNL447I CANNOT DELETE ENTRY *value* BECAUSE THERE IS AN INDOUBT THREAD TO BE RESOLVED FIRST

Explanation

A -RESET INDOUBT command was issued with LUNAME(*value*), IPADDR(*value*), LOCATION(*value*), or LUWID(*value*). The *value* is an LU name, an IP address, a location, or a LUWID (or its token), that identifies a logical unit of work for which Db2 has participant indoubt resolution responsibility, coordinator indoubt resolution responsibility, or both.

System action

Resynchronization responsibility information was not purged. System processing continues normally.

User response

Use the information in this section to determine the correct action to take. Then issue the proper command to perform that action.

The two most probable causes for the problem are that the -RESET INDOUBT command was issued with the wrong parameters, or that an incorrect 'value' was specified. Use the -DISPLAY THREAD(*) TYPE(INDOUBT) LOCATION(*) command to display the indoubt information known to Db2.

1. If the intent was to purge participant or coordinator indoubt resolution responsibility, then examine the -DISPLAY THREAD output (DSNV401) to determine the location name, or names, for which this responsibility is to be purged. Then use the -RESET INDOUBT LUNAME(*luname*) command with the FORCE option or the -RESET INDOUBT IPADDR(*ip-address*) command with the FORCE option to purge this responsibility.

   To determine the luname or IP address and resync port for an upstream coordinator that can be used with the FORCE option, look at the coordinator information after the DSNV406I message in the -DISPLAY THREAD output. There are two tokens associated with the coordinator information that are delimited by a dash (-) for SNA connections, and by a double period (..) for TCP/IP connections.

   - The first token is the partner location name or "<luname>" for an SNA connection, or the IP address for the TCP/IP connection.
   - The second token is the partner LU name for an SNA connection, or the resync port number for a TCP/IP connection.

   To determine the luname or IP address and resync port for downstream participants that can be used with the FORCE option, look at the location names after the V444 message and in the V450 message in the DISPLAY THREAD output (DSNV401). There are two or three tokens associated with the participant location.

   - The first token is the partner location name.
   - The second token is the partner LU name for an SNA connection, or the IP address for a TCP/IP connection. The second token is delimited from the first token by a dash (-).
   - The third token is the partner resync port number. The third token appears only if the second token is an IP address, and is delimited from the second token by a double period (..).

   Remember that the FORCE option causes Db2 to purge all knowledge of indoubt resolution responsibility involving the LUNAME or IPADDR values specified in the command.

   Use caution when using the FORCE parameter to purge participant indoubt information when no errors are precluding automatic resolution. Normally, after the use of the RECOVER INDOUBT command, automatic resolution with the coordinator determines if heuristic damage occurred. This detection is lost if RESET INDOUBT is used before automatic resolution with the coordinator can be achieved.

   Use caution when using the FORCE parameter to purge coordinator indoubt information when no errors are precluding automatic resolution. Once the information is purged, any participant that is indoubt is forced to use a heuristic decision process to resolve the indoubt logical unit of work.
2. Examine the -DISPLAY THREAD output. If the value specified in the command (and displayed in the DSNL447I message) is incorrect, determine the correct value and reissue the command using the correct value.

Related reference
-RESET INDOUBT (Db2) (Db2 Commands)
-RECOVER INDOUBT (Db2) (Db2 Commands)
-DISPLAY THREAD (Db2) (Db2 Commands)

Related information

DSNV401I
DISPLAY THREAD REPORT FOLLOWS -

DSNL447I
CANNOT DELETE ENTRY *value* BECAUSE THERE IS AN INDOUBT THREAD TO BE RESOLVED FIRST

DSNL448I UNABLE TO FORCE COLD START WITH *nettype netvalue*, SESSION STILL EXISTS

Explanation

A -RESET INDOUBT LUNAME('luname') FORCE or a -RESET INDOUBT IPADDR('ipaddr') FORCE command was issued to force a cold start, but network connections still exist between Db2 and the partner 'luname' or 'ipaddr'. The information related to this partner was not purged, so a cold start is not performed.

nettype
Identifies the type of network used to access the remote site. There are two possible values:

LU --
indicates that VTAM is used to connect to the remote site.

IPADDR --
indicates that TCP/IP is used to connect to the remote site.

netvalue
The network address of the remote location. *netvalue* can be blank.

- If *nettype* is LU, *netvalue* specifies the VTAM LU name of the remote location.
- If *nettype* is IPADDR, *netvalue* specifies the IP address of the remote location.

System action

System processing continues normally.

User response

For SNA, you can use the VTAM command DISPLAY NET to determine the existence of sessions between two logical units. Terminate the sessions by using the VTAM command VARY NET,TERM to allow the RESET INDOUBT to occur. For TCP/IP, terminate all connections to the IP address.Determine the correct luname or ipaddr and reissue the command.

DSNL449I DB2 HAS NO INFORMATION RELATED TO LUNAME *luname*

Explanation

A -RESET INDOUBT LUNAME('luname') FORCE command was issued but Db2 has no knowledge of the specified 'luname'.

luname
The logical unit name, as defined to VTAM, of the coordinator or participant

System action

No information was purged. System processing continues normally.

User response

Determine the correct luname as follows:

- Use the -DISPLAY THREAD(*) TYPE(INDOUBT) LOCATION(*) command to determine locations for which Db2 has indoubt responsibility.
- Query the SYSIBM.LOCATIONS table to correlate a location name with an luname. The LINKNAME column contains the luname associated with the location name in the LOCATION column.

Then reissue the command, specifying the correct luname.

DSNL450I DDF THREAD *luwid=token* IS BETWEEN PHASE 1 AND PHASE 2 OF COMMIT. THREAD IS NOW AN INDOUBT THREAD AS A RESULT OF CANCEL REQUEST.

Explanation

The identified DDF thread was in a prepared state waiting for the commit or backout decision of the commit coordinator. The thread cannot be canceled in this state. However, the thread was removed from the active state and placed into the indoubt state. The conversation with the coordinator was deallocated. The thread is now indoubt and appears in the display thread report for indoubt threads. The resources held by the thread continue to be held. Automatic resolution of the indoubt state is attempted periodically. Resources held by the thread are released after indoubt resolution occurs.

luwid=token
The global logical unit of work id and the local token that identify the thread

System action

Processing continues normally.

Operator response

If the purpose of canceling this thread was to free the resources held by the thread, call the database administrator.

Database Administrator Action: To release the resources held by the indoubt thread before automatic resolution with the coordinator, a manual commit or abort decision can be made with the RECOVER INDOUBT command. First, issue the DISPLAY THREAD command for an indoubt thread report, which includes the subject thread. From this report, determine the name of the coordinator. Contact the coordinator system and find out whether a commit or abort decision was made.

DSNL451I **QUALIFYING INDOUBT INFORMATION FOR LUNAME *luname* NOT FOUND**

Explanation

A -RESET INDOUBT LUNAME('luname') command was issued, but Db2 has no indoubt information about the specified luname.

luname
The logical unit name, as defined to VTAM, of the coordinator or participant

System action

No indoubt information was purged. System processing continues normally.

User response

Use the -DISPLAY THREAD(*) TYPE(INDOUBT) LOCATION(*) command to list the locations for which Db2 has indoubt information. Entries associated with a particular LUNAME have a location name in this form: '<luname>'. Use 'luname' (without the enclosing brackets) as the input string to RECOVER INDOUBT.

After determining the correct luname, reissue the command.

DSNL452I **QUALIFYING INDOUBT INFORMATION FOR LUNAME *luname* HAS BEEN PURGED**

Explanation

A -RESET INDOUBT LUNAME('luname') command, which was issued to purge indoubt information about the specified luname completed successfully. The indoubt information was purged.

luname
The luname specified for the LUNAME keyword in the -RESET INDOUBT LUNAME(luname) command being processed.

System action

The specified indoubt information was purged. System processing continues normally.

DSNL453I ***csect* QUALIFYING INDOUBT INFORMATION FOR IPADDR *ipaddr* NOT FOUND**

Explanation

A -RESET INDOUBT IPADDR('ipaddr') command was issued, but Db2 has no indoubt information about the specified IP address.

csect
The CSECT name of the Db2 module that issued the message

ipaddr
The IP address of the coordinator or participant.

System action

No indoubt information was purged. System processing continues normally.

User response

Use the -DISPLAY THREAD(*) TYPE(INDOUBT) LOCATION(*) command to list the locations for which Db2 has indoubt information. Entries associated with TCP/IP have a string with this format in the LOCATION field: "nnn.nnn.nnn.nnn".

After determining the correct *ipaddr*, reissue the command.

DSNL454I ***csect* QUALIFYING INDOUBT INFORMATION FOR IP ADDRESS *ipaddr* HAS BEEN PURGED**

Explanation

A -RESET INDOUBT IPADDR('ipaddr') command, which was issued to purge indoubt information about the specified IP address completed successfully. The indoubt information was purged.

csect
The CSECT name of the Db2 module that issued the message

ipaddr
The IP address specified for the IPADDR keyword in the -RESET INDOUBT IPADDR(ipaddr) command being processed

System action

The specified indoubt information was purged. System processing continues normally.

DSNL455I ***csect*** **DB2 HAS NO INFORMATION RELATED TO IP ADDRESS** ***ipaddr***

Explanation

A -RESET INDOUBT IPADDR('ipaddr') FORCE command was issued but Db2 has no knowledge of the specified 'ipaddr'.

csect
The CSECT name of the Db2 module that issued the message.

ipaddr
The IP address of the coordinator or participant.

System action

No information was purged. System processing continues normally.

User response

Determine the correct luname as follows:

- Use the -DISPLAY THREAD(*) TYPE(INDOUBT) LOCATION(*) command to determine locations for which Db2 has indoubt responsibility. Entries associated with TCP/IP locations specify "nnn.nnn.nnn.nnn" in the LOCATION field.

Reissue the command; specify the correct ipaddr.

DSNL500I **CONVERSATION FAILED TO LOCATION=*locname* RESOURCE=*luname.modename.convid.sessid* RTNCD=*global vtam primary return code* FDBK2=*global vtam secondary return code* RCPRI=*appc-specific primary return code* RCSEC=*appc-specific secondary return code* SENSE=*sna sense code***

Explanation

An advanced program-to-program communications (APPC) conversation failed, or could not be allocated, because a VTAM return code indicates a conversation failure. VTAM return codes are defined in *z/OS Communications Server SNA Programmer's LU 6.2 Reference*.

SNA sense codes that start with 00 represent Db2 reason codes.

The variables that are not return codes are described as follows:

Variable
Description

locname
The location name associated with the remote site.

luname
The VTAM LU name associated with the remote location.

modename
The logon mode used by Db2 to allocate the conversation.

convid
The conversation identifier given Db2 by VTAM when the conversation was allocated.

sessid
The session identifier given Db2 by VTAM when the conversation was allocated.

System action

Communication on the conversation is discontinued.

Operator response

Notify the system programmer.

System programmer response

Take the actions that are specified for the SNA sense code and Db2 reason code values.

Related concepts
Db2 reason codes (Db2 Codes)
Related reference
SNA sense codes (Db2 Codes)

DSNL501I **CNOS PROCESSING FAILED FOR LU *luname* AND MODE *modename* RTNCD=*global vtam return code* FDBK2=*global vtam secondary return code* RCPRI=*appc-specific primary return code* RCSEC=*appc-specific secondary return code* SENSE=*vtam sense code***

Explanation

A failure occurred while attempting to negotiate limits with the specified location for a LU and mode. VTAM return codes are described in *z/OS Communications Server SNA Programmer's LU 6.2 Reference*. VTAM sense codes that start with 00 represent Db2 reason codes.

The variables are described as follows:

luname
The VTAM LU name associated with the remote location.

modename
The logon mode used by Db2 to allocate the conversation.

System action

All communication to the remote location fails until the limits can be negotiated with the remote location.

Operator response

Notify the system programmer.

System programmer response

Refer to *z/OS Communications Server SNA Programmer's LU 6.2 Reference* and the Db2 reason code for failure analysis.

Related concepts
Db2 reason codes (Db2 Codes)

DSNL502I **SYSTEM CONVERSATION FAILED TO LOCATION *locname* RESOURCE=*luname.modename.convid.sessid* RTNCD=*global vtam primary return code* FDBK2=*global vtam secondary return code* RCPRI=*appc-specific primary return code* RCSEC=*appc-specific secondary return code* SENSE=*sna sense code***

Explanation

A system conversation failed, or could not be allocated, because VTAM returned a nonzero return code.

SNA sense codes that start with 00 represent Db2 reason codes.

locname
The location name associated with the remote site.

luname
The VTAM LU name associated with the remote location.

modename
The logon mode used by Db2 to allocate the conversation.

convid
The conversation identifier given Db2 by VTAM when the conversation was allocated.

sessid
The session identifier given Db2 by VTAM when the conversation was allocated.

System action

Communication on the conversation is not allowed.

Operator response

Notify the system programmer.

System programmer response

Take the actions that are specified for the SNA sense code and Db2 reason code values.

Related concepts
Db2 reason codes (Db2 Codes)
Related reference
SNA sense codes (Db2 Codes)
Related information
Return Codes (z/OS Communications Server: SNA Programmer's LU 6.2 Guide)

DSNL504I ***csect-name* RESOURCE UNAVAILABLE REASON=*reason* TYPE=*resouce-type* LOCATION=*location* NAME=*resource-name***

Explanation

The requested function requires a resource that is currently unavailable.

csect-name
The name of the control section that issued the message.

reason
The reason that the resource is unavailable.

location
The location of the unavailable resource.

resource-type* and *resource-name
The type and name of the resource that the message identifies. For an explanation of *resource-type* and *resource-name* values, see Appendix C, “Resource types,” on page 1171.

Operator response

Note the reason, type codes, location, and name.

Related concepts
Db2 reason codes (Db2 Codes)

DSNL510I ***csect-name* CONVLIMIT NEGOTIATED FROM *x* TO *y* WITH LOCATION *locname* FOR LU *luname* AND MODE *modename***

Explanation

The maximum conversation limit is changed for a mode with a remote subsystem. The limit might change when a CNOS request is received from or sent to a remote subsystem, and the limit is determined by VTAM.

x
The most recent value of CONVLIMIT before the last CNOS request was processed by advanced program-to-program communications (APPC)/ VTAM for the specified mode name to the specified location.

y
The current value of CONVLIMIT for the specified mode name to the specified location.

locname
The location name associated with the remote site that sent the CNOS request to the local Db2 subsystem, or received the CNOS request from the local Db2 subsystem.

luname
The VTAM LU name associated with the remote location that had its CONVLIMIT changed.

modename
The logon mode for the specified location that had its CONVLIMIT changed.

System action

Conversation requests are queued when the maximum conversation limit is reached for a mode to remote subsystem.

DSNL511I ***csect-name*** **TCP/IP CONVERSATION FAILED TO LOCATION** ***location-name*** **IPADDR=***ip-address* **PORT=***port* **SOCKET=***socket* **RETURN CODE=***return-code* **REASON CODE=***reason-code*

Explanation

A TCP/IP socket call failed with the error condition identified by the return code and reason code.

csect-name
The name of the control section that issued the message.

location-name
The location name associated with the remote site.

ip-address
The IP address of the remote site.

port
The TCP/IP port used by the remote site.

socket
The TCP/IP socket call that returned the error.

return-code
The error condition reported by TCP/IP, as a decimal number. This code is issued by z/OS UNIX System Services or z/OS Communications Server.

A 3448 return code condition is typically related to a TCP/IP DROP-related event, such as the result of a TCP/IP DROP command. Db2 also uses a TCP/IP DROP service for various cancel-related events, which might include the z/OS CANCEL command, the Db2 CANCEL THREAD command, or Db2 idle-thread timeout conditions.

reason-code
Further detail associated with the TCP/IP return code, as a hexadecimal number. This code is issued by z/OS UNIX System Services or z/OS Communications Server.

The following values together indicate a zero-length receive, which is considered a closed condition:

- SOCKET=RECV
- RETURN CODE=0
- REASON CODE=00000000

System action

Communication on the conversation is discontinued.

Operator response

Notify the system programmer.

System programmer response

Use the information provided in the message to correct the problem.

User response

Notify the system programmer.

Problem determination

Determine the meaning of the return and reason codes issued by z/OS UNIX System Services or z/OS Communications Server.

Related reference

z/OS UNIX System Services: Messages and Codes

z/OS Communications Server: IP and SNA Codes

DSNL512I ***csect-name*** **TCP/IP** ***socket*** **FAILED WITH RETURN CODE=***return-code* **AND REASON CODE=***reason-code*

Explanation

A TCP/IP socket call used to establish communication between Db2 and TCP/IP failed.

csect-name
The name of the control section that issued the message.

socket
The name of the TCP/IP socket call that failed.

return-code
The return code reported by TCP/IP, as a decimal number. This code is issued by z/OS UNIX System Services or z/OS Communications Server.

reason-code
The reason code reported by TCP/IP, as a hexadecimal number. This code is issued by z/OS UNIX System Services or z/OS Communications Server.

System action

Db2 will periodically retry the socket call to establish TCP/IP communication.

Operator response

Notify the system programmer.

System programmer response

The response is based on the TCP/IP socket call that failed.

***socket*=GETHOSTNAME**
***socket*=GETNAMEINFO(*ip-address*)**
***socket*=GETADDRINFO(*host-name*)**
The GetHostName, GetNameInfo, or GetAddrInfo call has failed.

During DDF initialization, Db2 first determines its host name using a GetHostName socket call. Db2 must then determine its IP address. If an IP address is specified in the BSDS using the DSNJU003 utility, or on the PORT statement in the TCP/IP profile, then Db2 uses this IP address. Otherwise, Db2 executes a GetAddrInfo(*host-name*) socket call, using the *host-name* that was returned on the prior GetHostName socket call, which returns the first IP address listed in the name server or local host table.

Important: The host name or IP address returned could depend on the selected TCP/IP stack, in the event that there are multiple TCP/IP stacks. Db2 requires z/OS UNIX System Services sockets, and it is z/OS UNIX System Services that determines the TCP/IP stack to use. z/OS UNIX System Services provides a way for users to select a specific TCP/IP stack by using the BPXTCAFF utility.

Db2 then issues a GetNameInfo socket call to determine the domain name associated with the derived IP address.

The z/OS Resolver handles the GetNameInfo socket call because Db2 uses the z/OS UNIX System Services Asynchronous Sockets interface. This resolver uses the resolver configuration information available to DDF. Until this information for the selected TCP/IP is correctly specified for DDF, the z/OS Resolver will be unable to determine the domain name for DDF. You can find the search order for the "resolver configuration files" for a z/OS application, such as DDF, in the IP Configuration manual for the appropriate level of the Communication Server for your z/OS operating system.

***socket*=GETHOSTNAME**
Db2 DDF initialization invoked a TCP/IP GetHostName socket call in order to determine the host name associated to TCP/IP, and hence the host name associated with the Db2 subsystem. However, the call failed and Db2 is not able to determine the host name. Db2 retries the socket call periodically.

***socket*=GETNAMEINFO(*ip-address*)**
Db2 invoked a TCP/IP GetNameInfo socket call to determine the domain name for the specified IP address. However, the call failed and Db2 is not able to determine the domain name. Db2 retries the socket call periodically.

***socket*=GETADDRINFO(*host-name*)**
Db2 invoked a TCP/IP GetAddrInfo socket call to determine the IP address associated with the specified host name. However, the call failed and Db2 is not able to determine the IP address. Db2 retries the socket call periodically.

If you want a BSDS-specified IP address, correct the BSDS. This requires you to stop and restart Db2. Otherwise, verify that the provided host name is correct and take the appropriate action:

- If the host name is incorrect, correct the host name in the appropriate resolver configuration file, refresh TCP/IP, and then stop and start DDF so that the new host name is refreshed for DDF initialization.
- If the host name is correct, then TCP/IP is unable to resolve the host name to an IP address. You must make changes in order to allow for proper host name to IP address resolution. If the changes have been made to

the name server or local host table, refresh the resolver.

***socket*=POLL**
The online ZPARM was changed using the SET SYSPARM command, changing the MAXDBAT from a positive value to zero. In this case, the message is informational, indicating that Db2 terminated its TCP/IP listening capability for SQL related work because Db2 can no longer accept SQL related connections from remote partners when MAXDBAT is set to zero.

***socket*=SHUTDOWN_REG (USS_UNAVAILABLE)**
The z/OS UNIX System Services (USS/OMVS) environment is not available. DDF start processing continues and this message is periodically repeated until the Unix System Services environment becomes available or DDF is stopped. You can use the z/OS "F OMVS, RESTART" command to start the z/OS UNIX System Services environment.

***socket*=SETRLIMIT**
When *reason code*=1148033C, DDF needs to be defined as a superuser. For instructions on how to enable DDF as a superuser, see Enabling DDF for UNIX System Services and TCP/IP (Db2 Installation and Migration).

***socket*=TCPKEEPALIVE**
Db2 issues this socket call as a result of the TCP/IP KeepAlive value specified in the Db2 parameters module (usually DSNZPARM). You may specify this value by the TCP/IP KEEPALIVE value in the DSNTIP5 installation panel. Another way to specify the value is through the TCPKPALV value in the DSN6FAC macro, used to build the Db2 parameters module.

In this situation, processing continues, and Db2 does not retry the socket call. Verify that the TCP/IP stack being used by Db2 contains the required companion support for this function. If not, modify the Db2 parameter module to prevent Db2 from attempting to override the TCP/IP stack value.

***socket*=BSDS_ERROR (ADDRESS_ON_PORT_STMT)**
An IP address is specified in both the BSDS and the PORT statement of the TCP/ IP profile. An address should be specified in only one place. That is, Db2 detected that IP addresses have been specified in the BSDS (through the IPV4, GRPIPV4, IPV6, and GRPIPV6 keywords of the DSNJU003 Change Log Inventory utility) and also in the TCP/IP profile on the PORT statement for the port value to be used by this subsystem. Only one of the specifications can now have IP addresses. The Db2 TCP/IP environment will not initialize, and the error is periodically repeated until the error is corrected.

One of the IP address specifications must be removed from the BSDS or from the TCP/IP profile. However, the BSDS specification should be retained because the recommendation is to use BSDS specifications to define the IP addresses that are to be associated to Db2, and, because removing the BSDS specifications would require Db2 to be stopped. In this case, to allow the initialization of the Db2 TCP/IP environment to continue. The TCP/IP profile PORT statement can be changed to remove the IP addresses and then the changed specifications can be dynamically brought on-line, which favors the BSDS specifications.

***socket*=BSDS_ERROR (IPv6_REQUIRES_DUALMODE_STACK)**
A member or subsystem, or possibly a group, IPv6 address is specified in the BSDS without TCP/IP dual mode stack enabled. Db2 ignores all IPv6 addresses defined in the BSDS and DDF start-processing continues normally.

You should either enable a dual mode stack or delete all of the BSDS-defined IPv6 addresses and use only IPv4 addresses.

***socket*=BINDSPECIFIC NOT SUPPORT WITH SECURE PORT**
A secure port was specified in the BSDS but an IP address is simultaneously defined on the PORT statement in the TCP/IP profile (PROFILE.TCPIP).

DDF supports secure ports only when it is listening on the INADDR_ANY.

***socket*=DVIPA ACTIVATION(*ip-address*)**
The specified IP address cannot be activated as a VIPARANGE DVIPA. Db2 does not know whether the specified IP address was intended to be used as a DVIPA. If it was intended to be used as a DVIPA, correct the error and recycle DDF to activate it. However, if the IP address was not intended to be used as a DVIPA, ignore this message.

***socket*=EZBNMIF4_DROPCON**
Db2 invoked the TCP/IP EZBNMIF4 (EZBNMIFR) service to drop a connection. The call failed but Db2 processing continues. Db2 periodically issues the message until the error is corrected. Refer to Using the EZBNMIFR requests (z/OS Communications Server: IP Programmer's Guide and Reference) for an explanation of the return and reason code values.

The most common cause for the failure is a return code value of 111 (EACCES) and a reason code value of 77E800DC (JRSAFNotAuthorized). This

return and reason code indicates that TCP/IP determined that RACF security profiles were not defined to permit Db2 to use the service. The user ID that is associated with the *ssnm*DIST started task requires CONTROL access to the MVS.VARY.TCPIP.DROP command for the OPERCMDS class. Refer to Enabling DDF for UNIX System Services and TCP/IP (Db2 Installation and Migration) for more information.

***socket*=ACCEPT(*ip-address*..0)**

When *return-code*=3448 and *reason-code*=768F0442, TCP/IP DVIPA services are no longer available. TCP/IP deleted the IP address, and that IP address is no longer usable. The TCP/IP listener is disabled.

The Db2 TCP/IP listener attempts to restart every 30 seconds. When TCP/IP DVIPA services are restored, the TCP/IP listener restarts and issues message DSNL519I or DSNl523I to indicate that TCP/IP DVIPA services are restored.

***socket*=BIND(*ip-address*..0)**

When *return-code*=1116 and *reason-code*=744C7230, the IP address that is defined in the BSDS is not valid or not usable. The Db2 TCP/IP listener is not available, but DDF startup completes.

To correct this error, follow these steps:

1. Stop Db2.
2. Run the change log inventory utility (DSNJU003) DDF statement to set a valid and usable IP address in the BSDS.
3. Restart Db2.

When *return-code*=1116 and *reason-code*=744C7231, there are no available ports in the TCP ephemeral port range that can be used by Db2 to determine the availability of DVIPA services.

The Db2 TCP/IP listener continues its setup but Db2 cannot determine the availability of DVIPA services.

To correct this error, increase the range of TCP ephemeral ports on the TCPCONFIG EPHEMERALPORTS definition in the TCP/IP profile configuration. Refer to TCPCONFIG statement (z/OS Communications Server: IP Configuration Reference) for more information on the TCPCONFIG TCP/IP profile configuration statement.

When *return-code*=111 and *reason-code*=744C735A, Db2 does not have authority to access an unreserved TCP protocol port that can be used by Db2 to determine the availability of DVIPA services.

The Db2 TCP/IP listener continues its setup but Db2 cannot determine the availability of DVIPA services.

To correct this error, create a PORT UNRSV TCP definition that allows Db2 to access unreserved ports in the TCP/IP profile configuration. Refer to PORT statement (z/OS Communications Server: IP Configuration Reference) for more information on the PORT statement.

When *return-code*=111 and *reason-code*=744C735B, Db2 does not have permission from the System authorization facility (SAF) to access an unreserved TCP protocol port that can be used by Db2 to determine the availability of DVIPA services.

The Db2 TCP/IP listener continues its setup but Db2 cannot determine the availability of DVIPA services.

To correct this error, grant to the Db2 user ID READ permission to RACF resource EZB.PORTACCESS.*sysname*.*tcpname*.*safname*. The parts of the resource name are:

- EZB.PORTACCESS is constant
- *sysname* is the value of the MVS &SYSNAME. system symbol.
- *tcpname* is the name of the procedure used to start the TCP stack.
- *safname* is the value of the SAF keyword in the PORT UNRSV TCP command.

Refer to PORT statement (z/OS Communications Server: IP Configuration Reference) for more information on the PORT UNRSV TCP statement.

***socket*=LISTEN(*ip-address*..0)**

When *return-code*=111 and *reason-code*=744C735A, Db2 does not have authority to access an unreserved TCP protocol port that can be used by Db2 to determine the availability of DVIPA services.

The Db2 TCP/IP listener continues its setup but Db2 cannot determine the availability of DVIPA services.

To correct this error, create a PORT UNRSV TCP definition that allows Db2 to access unreserved ports in the TCP/IP profile configuration. Refer to PORT statement (z/OS Communications Server: IP Configuration Reference) for more information on the PORT statement.

When *return-code*=111 and *reason-code*=744C735B, Db2 does not have permission

from the System authorization facility (SAF) to access an unreserved TCP protocol port that can be used by Db2 to determine the availability of DVIPA services.

The Db2 TCP/IP listener continues its setup but Db2 cannot determine the availability of DVIPA services.

To correct this error, grant to the Db2 user ID READ permission to RACF resource EZB.PORTACCESS.*sysname*.*tcpname*.*safname*. The parts of the resource name are:

- EZB.PORTACCESS is constant
- *sysname* is the value of the MVS &SYSNAME. system symbol.
- *tcpname* is the name of the procedure used to start the TCP stack.
- *safname* is the value of the SAF keyword in the PORT UNRSV TCP command.

Refer to PORT statement (z/OS Communications Server: IP Configuration Reference) for more information on the PORT UNRSV TCP statement.

User response

Notify the system programmer.

Problem determination

Determine the meaning of the return and reason codes issued by z/OS UNIX System Services or z/OS Communications Server.

If *socket*=BINDSPECIFIC NOT SUPPORT WITH SECURE PORT, check whether the PTF for APAR PI92982 was applied. If not, apply that PTF.

Related concepts

Update the BSDS with the DSNJU003 utility (Db2 Data Sharing Planning and Administration)

Related tasks

Requesting transport affinity (BPXTCAFF information) (z/OS UNIX System Services Planning)

Enabling DDF for UNIX System Services and TCP/IP (Db2 Installation and Migration)

Related reference

z/OS UNIX System Services: Messages and Codes

z/OS Communications Server: IP and SNA Codes

DSNJU003 (change log inventory) (Db2 Utilities)

PORT statement (z/OS Communications Server: IP Configuration Reference)

TCPCONFIG statement (z/OS Communications Server: IP Configuration Reference)

Related information

DSNL519I
csect TCP/IP SERVICES AVAILABLE FOR DOMAIN *domain* AND PORT *tcpport*

DSNL523I
csect TCP/IP SERVICES AVAILABLE FOR IP ADDRESS *ipaddr* AND PORT *port*

DSNL513I *csect* TCP/IP GETHOSTBYNAME FAILED WITH ERRNO=*errno* FOR DOMAIN *domain*

Explanation

Db2 encountered a TCP/IP gethostbyname socket call error when attempting to convert a TCP/IP domain name into an IP address.

Variable
Description

csect
The CSECT name of the Db2 module that issued the message.

errno
The error condition reported by TCP/IP.

domain
The TCP/IP domain name that Db2 wants to convert into an IP address. Db2 obtains the *domain* value from the IPADDR column of the SYSIBM.IPNAMES communications database table or from the trusted context ADDRESS attribute defined in the SYSIBM.SYSCTXTTRUSTATTRS catalog table.

System action

If the row in SYSIBM.IPNAMES containing the specified *domain* in the IPADDR column is invalid, then

- If the error occurs during DDF startup, the row in SYSIBM.IPNAMES is ignored.
- If the error occurs during an SQL statement, the SQL statement fails and the location associated with the SYSIBM.IPNAMES row is not available for TCP/IP communication.

If the trusted context ADDRESS attribute containing the specified *domain* defined in the SYSIBM.SYSCTXTTRUSTATTRS is invalid, then

- If the error occurs during implicit trusted connection processing, then the error is ignored and the connection is established without any additional privileges.
- If the error occurs during explicit trusted connection processing, then the connection processing fails.

Operator response

Notify the system programmer.

System programmer response

Correct the IPADDR column value in SYSIBM.IPNAMES or register the *domain* with TCP/IP. Correct the trusted context ADDRESS attribute value using the SQL ALTER TRUSTED CONTEXT statement. register the *domain* with TCP/IP.

User response

Notify the system programmer.

Problem determination

See System Programmer Response.

Related reference

IPNAMES catalog table (Db2 SQL)

Related information

Socket return codes (ERRNOs) (z/OS Communications Server: IP and SNA Codes)

DSNL514I ***csect-name*** **TCP/IP SERVICE** ***serv*** **IS NOT DEFINED**

Explanation

The TCP/IP getservbyname socket call did not find a matching definition for *serv*.

Variable
Description

serv
The TCP/IP service name that Db2 wants to convert into a TCP/IP port number. Db2 obtains the service name from the PORT column of the SYSIBM.LOCATIONS communication database table.

System action

The row in SYSIBM.LOCATIONS containing the specified service name in the PORT column is invalid. The associated LOCATION cannot be used for TCP/IP communication. If the error occurs during an SQL statement, the SQL statement fails.

Operator response

Notify the system programmer.

System programmer response

If the value specified by *serv* is incorrect, correct the PORT column value in SYSIBM.LOCATIONS.

If the value specified by *serv* is correct, register the service name with TCP/IP.

TCP/IP service names are case sensitive, so make sure that the PORT column in SYSIBM.LOCATIONS is an exact match for the service name defined to TCP/IP.

User response

Notify the system programmer.

Problem determination

See System Programmer Response.

DSNL515I ***csect-name*** **TCP/IP BIND FAILED FOR PORT** ***port*** **WITH RETURN CODE=***return-code* **AND REASON CODE=***reason-code*

Explanation

Db2 encountered an error on the TCP/IP bind socket call while attempting to register a TCP/IP port number with the TCP/IP instance.

csect-name
The name of the control section that issued the message.

port
The TCP/IP port number that Db2 was unable to register with the TCP/IP instance.

return-code
The return code reported by TCP/IP, as a decimal number. This code is issued by z/OS UNIX System Services or z/OS Communications Server.

reason-code
The reason code reported by TCP/IP, as a hexadecimal number. This code is issued by z/OS UNIX System Services or z/OS Communications Server.

System action

The request fails. Db2 will continue to try to activate the TCP/IP port number periodically.

Operator response

Notify the system programmer.

System programmer response

If this error occurs for the TCP/IP port that is used for incoming DRDA requests, the error is probably caused by Db2 restarting on a CEC that already has another Db2 subsystem using the DRDA port number.

If this error occurs for a TCP/IP port that is used for incoming DRDA requests to an ALIAS, the error is

probably caused by some of the reasons that an error would occur for the normal DRDA request port. Check to ensure that the port value was also not previously reserved for another application in the system's TCP/IP profile.

Define the TCP/IP port number used by Db2 to the TCP/IP instance, or use the change log inventory utility to correct the TCP/IP port number used by Db2.

User response

Notify the system programmer.

Problem determination

Determine the meaning of the return and reason codes issued by z/OS UNIX System Services or z/OS Communications Server.

Related reference

z/OS UNIX System Services: Messages and Codes

z/OS Communications Server: IP and SNA Codes

DSNL516I ***csect-name*** **LANGUAGE ENVIRONMENT SERVICES NOT AVAILABLE. CEEPIPI ROUTINE CANNOT BE LOADED**

Explanation

Db2 must load the Language Environment interface module (CEEPIPI) to process functions requiring Language Environment services. These Language Environment services are required for TCP/IP socket calls, encryption and decryption, and so on. If the CEEPIPI module is not included in an accessible data set such as STEPLIB data sets or the LPA library, DDF is unable to use the Language Environment.

System action

DDF startup continues, but DDF users cannot use Db2 functions that require Language Environment services.

System programmer response

Add the Language Environment library to the DDF STEPLIB concatenation or to the LPA library. The Language Environment library must be APF authorized when it appears in the DDF STEPLIB concatenation.

Problem determination

Collect the following diagnostic item listed in

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.

.

DSNL517I ***csect-name*** **CEEPIPI** ***func*** **SERVICE FAILED WITH RETURN CODE=*return-code***

Explanation

Db2 uses the Language Environment CEEPIPI service to issue certain TCP/IP socket calls. The Language Environment return code *return-code* was not expected for the indicated Language Environment function call.

func
The function requested by Db2. Possible values are:

add_entry(module-name)
Add an entry to the Language Environment PIPI table dynamically. Module-name is the name of the module that failed to be added to the PIPI table.

call_sub
Run a program that issues a TCP/IP socket call using an existing Language Environment run time environment.

del_sub
Delete an entry from the Language Environment PIPI table dynamically.

init_sub
Create Language Environment sub run time environment.

term
Terminate the Language Environment run time environment.

return-code
The return code received from CEEPIPI.

System action

The attempt to issue the Language Environment request fails.

If this message is issued during DDF startup, DDF startup continues.

If this message is issued during an SQL statement, a -904 SQLCODE is returned to the calling application.

System programmer response

See Problem Determination.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.

If the function requested by Db2 was *add-entry(module-name)*, an incorrect link edit of the module could create unresolved references. To determine if link edit problems exist, run the z/OS AMBLIST utility with LISTLOAD and OUTPUT=XREF.

Related reference

z/OS Communications Server: IP and SNA Codes

Related information

-904 (Db2 Codes)

DSNL518I ***csect-name*** **LE/370 ENCLAVE FAILED WITH RETURN CODE=*erc* AND FEEDBACK=*fi***

Explanation

Db2 uses the Language Environment CEEPIPI call_sub service to execute certain TCP/IP socket calls. The CEEPIPI interface returned information indicating a failure occurred while executing the TCP/IP socket.

erc
The Language Environment enclave return code.

fi
Contains one or two message identifiers. The message identifiers are constructed from the Language Environment condition token.

The message identifiers are constructed as follows:

- Single message: Facility_Id combined with Msg_No
- Two messages: Facility_Id combined with Class_Code and Facility_Id combined with Cause_Code

System action

The SQL statement fails with SQLCODE -904.

System programmer response

A description of the Language Environment enclave return code and the condition token are documented in *Language Environment for OS/390 & VM Programming Guide*.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.

.

DSNL519I ***csect*** **TCP/IP SERVICES AVAILABLE FOR DOMAIN *domain* AND PORT *tcpport***

Explanation

Db2 is ready to accept connections on any IP address supported by the TCP/IP stack. This message is issued when re-initialization is successful. Db2 will not accept any connection request until this message is issued.

Variable
Description

csect
The CSECT name of the Db2 module that issued the message.

domain
The TCP/IP domain name used by this Db2 subsystem to accept incoming connection requests.

tcpport
The TCP/IP port number used by this Db2 subsystem to accept incoming connection requests.

System action

The Db2 TCP/IP port number is available to accept incoming connection requests on any IP address supported by the TCP/IP stack.

DSNL520I ***csect*** **TCP/IP SERVICES AVAILABLE FOR RESPORT *port***

Explanation

Db2 encountered a TCP/IP failure during DDF startup processing. The DSNL515I message identifies the cause of the failure. After the failure is detected, DDF periodically attempts to reinitialize TCP/IP to allow TCP/IP resynchronization to occur. This message is issued when reinitialization is successful.

Variable
Description

csect
The CSECT name of the Db2 module that issued the message.

port
The TCP/IP port number used by this Db2 subsystem to accept incoming resynchronization connection requests.

System action

The Db2 TCP/IP port is available to accept incoming resynchronization connection requests.

DSNL521I ***csect-name*** **INVALID DDF BSDS VALUES DETECTED (PORT=*port*,RESPORT=*rport* SECPORT=*sport*).**

Explanation

Db2 encountered invalid values for the TCP/IP port numbers in the DDF record of the BSDS. Valid TCP/IP port numbers must obey the following rules:

- If PORT or SECPORT is non-zero, RESPORT must also be non-zero.
- If RESPORT is non-zero, PORT or SECPORT must also be non-zero.
- PORT, RESPORT, and SECPORT must not specify the same value.

Variable
Description

port
The TCP/IP port number used by this Db2 subsystem to accept incoming DRDA SQL connection requests.

rport
The TCP/IP port number used by this Db2 subsystem to accept incoming two-phase commit resynchronization requests.

sport
The TCP/IP port number used by this Db2 subsystem to accept incoming secure DRDA connection requests.

System action

DDF startup terminates abnormally.

System programmer response

Use the Change Log Inventory utility (DSNJU003) to correct the TCP/IP port numbers used by Db2.

DSNL523I ***csect*** **TCP/IP SERVICES AVAILABLE FOR IP ADDRESS *ipaddr* AND PORT *port***

Explanation

Db2 is ready to accept connections on the specified IP address and port.

Variable
Description

csect
The CSECT name of the Db2 module that issued the message.

ipaddr
The IP address used by this Db2 subsystem to accept incoming connection requests.

port
The port number used by this Db2 subsystem to accept incoming connection requests. It can be a group SQL port, a resync port or an alias port.

System action

DDF is available to accept incoming requests on the specified IP address and port. If the IP address is specified on the PORT statement of the TCPIP profile, Db2 accepts connections only on the specified IP address. If the IP address is specified by either the DSNJU003 utility or the MODIFY DDF command, Db2 accepts connections on any IP address active on the stack, including the specified IP address, regardless of whether a domain name is provided or not.

This message is issued each time that the listener is re-initialized to accept requests for the specified IP address and port.

System programmer response

If you want Db2 to accept connections on any IP address, including the specified IP address, then the IP address must be specified in the BSDS. Specifying a domain name is optional when the IP address is specified in the BSDS.

DSNL600I **RESOURCE UNAVAILABLE CORRELATION ID=*correlation-id* CONNECTION ID=*connection-id* LUW ID=*luw-id=token* REASON=*reason-code* TYPE=*resource-type* LOCATION=*location-name* NAME=*resource-name***

Explanation

This message is produced at the requesting site when a distributed request requires a resource that is not available.

correlation-id
The correlation identifier of the thread associated with the requester of the resource. Correlation IDs beginning with '0*nn*' where *nn* is a number 01 - 28, identify system agents.

connection-id
The connection identifier of the requester.

luw-id=token
The logical unit of work ID of the thread followed by an '=' sign and a token which may be used in place of luw-id in any Db2 command that accepts luw-id as input.

resource-type* and *resource-name
The type and name of the resource that the message identifies. For an explanation of *resource-type* and *resource-name* values, see Appendix C, “Resource types,” on page 1171.

location-name
The location of the unavailable resource.

System action

The SQL statement cannot be executed.

User response

See Problem Determination.

Problem determination

The reason the resource is unavailable is identified by the reason code. Collect the information described for the reason code received.

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.

Related concepts
Db2 reason codes (Db2 Codes)
Related information
DSNT500I
csect-name RESOURCE UNAVAILABLE REASON *reason-code* TYPE *resource-type* NAME *resource-name*

DSNL601I ***command* RESTSVC REPORT FOLLOWS -**

Explanation

This message displays output from the DISPLAY, START, or STOP RESTSVC command. The output for a DISPLAY RESTSVC command provides status information of the REST services, which matched the one or more service name parameters. The output for a START or STOP RESTSVC command provides the status of processing the command against each service name parameter.

command
The kind of RESTSVC command being performed: DISPLAY, START, or STOP

The remaining output consists of one or more of the following messages in no particular order:

- DSNL602I: Invalid service name specified
- DSNL603I: No services found
- DSNL604I: Insufficient authority for command
- DSNL605I: Services display limit reached
- DSNL606I: All services not the only parameter
- DSNL607I: Successful services status change
- DSNL608I: Unsuccessful services status change
- DSNL609I: Insufficient message space
- DSNL610I: Display of services for a collection
- DSNL615I: Display service continuation
- DSN9022I: Successful command completion
- DSN9023I: Abnormal command completion

Refer to the particular message for details on its display.

System action

Processing continues normally.

User response

No action is required.

DSNL602I **INVALID SERVICE NAME SPECIFIED – *service_parm***

Explanation

A specified service name parameter was not valid.

service_parm
The RESTSVC keyword parameter being processed.

System action

Processing of the command is terminated

User response

Correct the service name parameter and reissue the command.

Problem determination

Examine the *service_parm* displayed. It must conform to the syntax of the RESTSVC keyword of the DISPLAY, START, or STOP RESTSVC command.

If the *service_parm* displayed appears to follow the command syntax, each service name parameter must be separated from each other by a comma(,). A comma cannot be part of a parameter. One way that a comma could have become part of a service name

parameter is that the entire parameter of the RESTSVC keyword was delimited by apostrophes (’). Apostrophes should only delimit a particular service name parameter if the case of the service name parameter is to be preserved. Otherwise the service name parameter will be folded to upper case prior to processing by Db2. For example, the RESTSVC specification RESTSVC('A.b,b.*')is incorrect, while the RESTSVC specification RESTSVC('A.b','b.*') is correct.

Another possible issue is how the wildcard character, asterisk (*) is used. An asterisk can be used in two ways. An asterisk can be used when requesting to display all services (*.*) or when requesting to display a subset of services in a particular collection. When displaying a subset of services, an asterisk can be used as a partial name of the service portion of a qualified/unqualified REST service name and can only be used as the last character of the partial name. It cannot be used anywhere in the collection ID or the version ID of a REST service name.

DSNL603I NO SERVICES FOUND FOR *service_parm*

Explanation

No REST services were found to match a parameter of the RESTSVC keyword.

service_parm
The RESTSVC keyword parameter being processed.

System action

Processing of the command will be continued if additional service name parameters were provided.

User response

Correct the service name parameter and reissue the command.

Problem determination

Examine the *service_parm* displayed. If the text is shown in upper case, and a service name parameter with lower case characters was provided, the service name parameter must be delimited by apostrophes (‘) to preserve the case.

DSNL604I USER HAS INSUFFICIENT AUTHORITY FOR *command* RESTSVC OF *service_parm*

Explanation

The invoker of the command does not have a necessary authority to process a RESTSVC command against a provided RESTSVC keyword parameter.

command
The kind of RESTSVC command being performed: DISPLAY, START, or STOP.

service_parm
The RESTSVC keyword parameter being processed.

System action

Processing of the command will be continued, if additional service name parameters were provided.

User response

The invoker of the RESTSVC command must have one of the authorities outlined in the description of the particular RESTSVC command. Obtain the necessary authority and reissue the command.

DSNL605I DISPLAY RESTSVC TERMINATED WITH MAXIMUM SERVICES

Explanation

While processing a DISPLAY RESTSVC command, the limit of the number of services which can be displayed by the command was reached.

System action

Processing of the DISPLAY RESTSVC command is terminated.

User response

The LIMIT keyword, of the DISPLAY RESTSVC command, provides a capability where the command issuer can request the maximum number of REST services to be displayed. If not specified, the LIMIT value defaults to 100. If the output from the command exceeds the specified or defaulted limit, the command will terminate with this message. If it is not known how many services could be displayed, then specify LIMIT(*) on the command. Reissue the command with a LIMIT keyword that will permit all requested services to be displayed.

DSNL606I *.* MUST BE THE ONLY RESTSVC PARAMETER

Explanation

The syntax rules of the RESTSVC command have been violated. An attempt to process the command against all services (*.*) can only be requested by itself. No other service name parameter can be provided.

System action

Processing of the particular RESTSVC command is terminated.

User response

Correct the RESTSVC keyword of the command by either specifying the all services parameter (*.*) by itself or removing the all services parameter (*.*) when specific service name parameters are processed. Resubmit the command.

DSNL607I ALL SERVICES HAVE BEEN *status* FOR *service_parm*

Explanation

A START or STOP RESTSVC command has successfully changed the status of one or more REST services. The status of the services that matched the *service_parm* have been changed successfully.

status
The new status of the changed REST services: STARTED or STOPREJ.

service_parm
The RESTSVC keyword parameter being processed.

System action

The changes to the status of the services are committed. Processing continues normally.

User response

No action is required.

DSNL608I command RESTSVC OF *service_parm* HAS FAILED DUE TO *reason*

Explanation

An error was detected within Db2 while processing the service name parameter.

command
The kind of RESTSVC command being performed: DISPLAY, START, or STOP.

service_parm
The RESTSVC keyword parameter being processed.

The reason for the failure can have the following formats:

***reason*=REST SERVICES ENVIRONMENT NOT AVAILABLE**
The REST services database objects either do not exist or are defined incorrectly.

reason*= REASON CODE *Db2_reason_code
During the processing of the command against the set of services identified by *service_parm*, a Db2 failure occurred. That failure is represented by *Db2_reason_code*. In some cases, a Db2 message may have been issued on the console.

System action

The command is terminated.

System programmer response

If the reason for the failure is due to the REST services database objects are not defined or are defined incorrectly, then create them using the recommendations found in Enabling Db2 REST services ().

Otherwise, determine the meaning of the *Db2_reason_code* as it relates to table modifications being performed against SYSIBM.DSNSERVICE.

If the reported *DB2_reason_code* is 00C900C0, a lock timeout was detected. The command could be retried at a later time. However, holding the lock resources needed for REST services database objects for an extended period of time is not normal.

It is possible Db2 messages may also have been displayed on the console. Review those messages for additional information that may address how to correct the error.

User response

Notify the system programmer.

DSNL609I DISPLAY TERMINATED DUE TO INSUFFICIENT MESSAGE SPACE

Explanation

The DISPLAY RESTSVC command could not obtain storage for additional messages. This situation only occurs for long display requests, such as one that requests all services that have been defined.

System action

The display is truncated.

User response

Reissue the DISPLAY RESTSVC command and specify a smaller number of services. For example, specify a

partial servicename in the DISPLAY RESTSVC command rather than the default (*.*).

DSNL610I

Explanation

The message starts the output from the DISPLAY RESTSVC command for a qualified collection and its one or more services. Multiple groupings of messages beginning with DSNL610I are possible from a single DISPLAY RESTSVC command.

```
DSNL610I
----COLLECTION=collid
SERVICE
VERSION          STATUS
service_name
version          status
service_name
version          status
DSNL610I
----COLLECTION=collid
SERVICE
VERSION          STATUS
service_name
version          status
service_name
version          status
```

The output that is displayed varies depending on the qualified collections and their qualified services. The following information can be provided in the output:

COLLECTION=*collid*
The collection id for the Db2 REST services that are included in the output. The collection id and the lines that follow make up one grouping of messages that are output from the DISPLAY RESTSVC command. Each collection id grouping starts with DSNL610I being displayed. Up to 3 lines of output may be required to display a full collection id of 128 characters.

SERVICE *service_name*

The name of the service. Up to 3 lines of output may be required to display a full service name of 128 characters.

VERSION *version*
The version of the service. Up to 4 lines of output may be required to display a full version of 64 characters. Version values can only be displayed if Db2 REST services have been created since Db2 REST service versioning was activated.

STATUS *status*
The status of the service. The status can be any of the following values:

STARTED
The service can be invoked.

STOPREJ
The service was placed in this state by the STOP RESTSVC command with the ACTION(REJECT) option (which is the default). All invoke requests for the service are rejected.

STARTED*
The service can be invoked and is the default version of the service.

STOPREJ*
The service was placed in this state by the STOP RESTSVC command with the ACTION(REJECT) option (which is the default). All invoke requests for the service are rejected. The service is also the default version of the service.

If the service is in any of the stopped states, you can use the START RESTSVC command to start the service.

System action

The DISPLAY RESTSVC command processing continues.

User response

No action required.

DSNL615I DISPLAY RESTSVC REPORT CONTINUE

Explanation

While processing a DISPLAY RESTSVC command requested from an MVS console, the console multiple line limit was about to be reached. The display of the set of services for a collection is temporarily halted. Once DSNL615I is issued, the display of the remaining services of the halted collection is resumed. The display is resumed as if the collection id was initially being displayed followed by its service names.

System action

Processing of the DISPLAY RESTSVC continues.

User response

No action is required.

DSNL700I *csect-name* CDB RESOURCE UNAVAILABLE, DEFAULTS MAY BE USED REASON=*reason* TYPE=*type* NAME=*name*

Explanation

This message indicates that a requested function required the CDB which is currently unavailable. Defaults can be used to allocate conversations or set conversation limits with VTAM and TCP/IP partners.

System action

If the SYSIBM.MODESELECT table is unavailable, VTAM defaults are used to allocate conversations. If the SYSIBM.LUMODES table is unavailable, VTAM defaults can be used for conversation limits. If the SYSIBM.LOCATIONS, SYSIBM.IPNAMES, SYSIBM.LULIST, or SYSIBM.LUNAMES tables are unavailable, conversations can not be allocated to remote LOCATIONs.

This message is non-scrollable. It remains highlighted on the console until you take the appropriate action.

Operator response

Note the REASON code, the TYPE code, and the NAME. See Problem Determination section for an explanation of the collected data.

Problem determination

The reason the resource is unavailable is identified by a reason code. Use the table defined for message DSNT500I to find the TYPE of resource identified in the message.

Related concepts

SQL codes (Db2 Codes)

Communications database for the requester (Managing Security)

Communications database for the server (Managing Security)

Related information

DSNT500I

csect-name RESOURCE UNAVAILABLE REASON *reason-code* TYPE *resource-type* NAME *resource-name*

Recovering from communications database failure (Db2 Administration Guide)

DSNL701I CDB OBJECT *object-name* DOES NOT EXIST

Explanation

The communications database (CDB) does not contain *object-name*. The incorrect *object-name* can be the database name, the table space name, or the table name.

System action

Termination of the distributed data facility (DDF) is initiated.

Operator response

Notify the system programmer.

System programmer response

Determine what caused the failure, define the object as required, and issue the -START DDF command.

Problem determination

Print the definition of the communications database (CDB).

DSNL702I CDB TABLE *table-name* DOES NOT HAVE PROPER COLUMN DEFINITIONS, COLUMN *column-name* IS MISSING OR INCORRECTLY DEFINED

Explanation

The communications database (CDB) needs a definition for 'column-name' in 'tablename'. The current definition is missing or incorrect.

System action

Termination of the distributed data facility (DDF) is initiated.

Operator response

Notify the system programmer.

System programmer response

Determine what caused the failure, define the column as required, and issue the -START DDF command.

Problem determination

Print the definition of the communications database (CDB).

DSNL703I CDB TABLE *table-name* DOES NOT HAVE PROPER INDEX DEFINITIONS, INDEX *index-name* IS MISSING OR INCORRECTLY DEFINED

Explanation

The communications database (CDB) requires an index name for *table-name*. The current definition is missing or incorrect.

System action

The distributed data facility (DDF) terminates.

Operator response

Notify the system programmer.

System programmer response

Define the index as required and issue the -START DDF command.

Problem determination

Print the definition of the communications database (CDB).

Related tasks

Populating the communications database (Db2 Installation and Migration)

Related reference

-START DDF (Db2) (Db2 Commands)

Related information

Recovering from a problem with a communications database that is incorrectly defined (Db2 Administration Guide)

DSNL704I CDB OBJECT *object-name* DOES NOT HAVE PROPER REFERENTIAL CONSTRAINT DEFINITIONS

Explanation

The communications database (CDB) requires referential constraint definitions for *object-name*. The current definition is missing or incorrect.

System action

Termination of the distributed data facility (DDF) is initiated.

Operator response

Notify the system programmer.

System programmer response

Determine what caused the failure, define the missing referential constraint, and issue the -START DDF command.

Problem determination

Print the definition of the communications database (CDB).

Related concepts

The role of the communications database (CDB) (Db2 Installation and Migration)

Related tasks

Populating the communications database (Db2 Installation and Migration)

Populating the communications database for use with TCP/IP (Db2 Installation and Migration)

Related reference

-START DDF (Db2) (Db2 Commands)

DSNL705I CDB IS UNAVAILABLE OR INCORRECTLY DEFINED

Explanation

During start-up of the distributed data facility, the required CDB was unavailable or incorrectly defined.

System action

Termination of the DDF is initiated.

Operator response

Notify the system programmer.

System programmer response

Refer to the previous message that specifies the cause of the CDB failure (DSNL700I, DSNL701, DSNL702I, DSNL703I, or DSNL704I). Determine what caused the failure, fix the error condition, and issue the -START DDF command.

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.

.

DSNL706I *csect-name* AN ERROR HAS OCCURRED IN DDF EXIT ROUTINE *routine*

Explanation

An error occurred following invocation of a DDF exit routine by Db2.

The variable "routine" is the name of the exit routine, DSNLHLIx, invoked by Db2.

System action

The system abends the failing database-access agent.

DSNL800I *csect-name* EXECUTION FAILED BECAUSE THE BIND DEPLOY FUNCTION IS NOT SUPPORTED BY THE SERVER WHICH CAUSED TERMINATION OF CONNECTION: LOCATION *connection-location*, PRODUCT ID *product-identifier*

Explanation

The current BIND command failed because the command was routed to a server that does not support the bind deploy function.

csect-name
The name of the control section that issued the message.

connection-location
The name of the server.

product-identifier
An alphanumeric string that identifies the product.

The format of product identifier values is *pppvvrrm*, where *ppp* is a 3-letter product code (such as DSN for Db2), *vv* is the version, *rr* is the release, and *m* is the modification level. For example, DSN11015 identifies Db2 11 in new-function mode, the value is 'DSN11015'. The product code (*ppp*) is one of the following values:

AQT for IBM Db2 Analytics Accelerator for z/OS
ARI for DB2 Server for VSE & VM
DSN for Db2 for z/OS
HTP for non-secure HTTP URL connections for Db2 native REST services
HTS for secure HTTPS connections for Db2 native REST services
JCC for IBM Data Server Driver for JDBC and SQLJ
QSQ for DB2 for i
SQL for Db2 for Linux, UNIX, and Windows

Modification (*m*) values have the following meanings:

0
Conversion and enabling-new-function modes for migration from DB2 10 (CM10, CM10*, ENFM10, and ENFM10*)

5
New-function mode.

System action

The BIND command fails. The package is not deployed.

Programmer response

Ensure that the database server is Db2 for z/OS DB2 9 new-function mode or greater to support bind deploy function.

Chapter 10. DSNM messages

Message identifiers that begin with DSNM communicate information about the IMS attachment facility.

All DSNM messages are sent to the IMS master terminal operator (MTO) and to the appropriate MVS console.

DSNM001I **IMS/TM *ims/tm-name* CONNECTED TO SUBSYSTEM *subsystem-name***

Explanation

This is an information message only. The control region of the specifiedIMS TM system successfully connected to the specifiedDb2 subsystem.

ims/tm-name
The name of theIMS TM system.

subsystem-name
The name of the Db2 subsystem.

All DSNM messages are sent to the IMS master terminal operator (MTO) and to the appropriate MVS console.

System action

IMS TM transactions can access Db2 resources.

DSNM002I **IMS/TM *ims/tm-name* DISCONNECTED FROM SUBSYSTEM *subsystem-name* RC=*reason-code***

Explanation

The specifiedIMS TM control region has disconnected from the specified Db2 subsystem for the indicated reason code.

ims/tm-name
The name of theIMS TM system.

subsystem-name
The name of the Db2 subsystem.

reason-code
The reason code:

A
IMS TM is terminating normally (for example, /CKPT FREEZE command).

B
IMS TM is terminating abnormally.

C
Db2 is terminating in a quiesce fashion (for example, Db2 stop quiesce command).

D
Db2 is terminating abnormally.

E
The connection betweenIMS TM and the Db2 subsystem is terminating; however, both subsystems remain operational.

All DSNM messages are sent to the IMS master terminal operator (MTO) and to the appropriate MVS console.

System action

The connection betweenIMS TM and Db2 terminated.IMS TM transactions can no longer access Db2 resources.

Operator response

Notify the system programmer.

System programmer response

Reason code A, C, or E makes this an information message. Reason code D indicates that a serious problem occurred in the Db2 subsystem, and that the SYS1.LOGREC should be examined. For reason code B or D, determine the failing subcomponent.

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Problem determination

SYS1.LOGREC and/or dump information may be available for reason codes B and D.

DSNM003I **IMS/TM *ims/tm-name* FAILED TO CONNECT TO SUBSYSTEM *subsystem-name* RC=*return-code***

Explanation

The specifiedIMS TM system control region did not connect to the specified Db2 subsystem.

ims/tm-name
The name of theIMS TM system.

subsystem-name
The name of the Db2 subsystem.

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return-code
The reason for the failure.

00
The Db2 subsystem is not operational. However, a notify message has been queued and, when the Db2 subsystem is started, it will automatically connect toIMS TM.

04
The connection attempt failed betweenIMS TM and the Db2 subsystem.

All DSNM messages are sent to the IMS master terminal operator (MTO) and to the appropriate MVS console.

System action

IMS TM transactions cannot access Db2 resources.

Operator response

For return code 00, start the Db2 subsystem. For return code 04, notify the system programmer.

Problem determination

For return code 04, anIMS TM attachment facility snap record (code X'5501FF') is written to theIMS TM log to indicate the reason for the failure.

Related tasks
Controlling CICS connections (Db2 Administration Guide)
Controlling IMS connections (Db2 Administration Guide)
Related information
Recovering Db2 when the CICS attachment facility cannot connect to Db2 (Db2 Administration Guide)
Recovering from IMS-related failures (Db2 Administration Guide)

DSNM004I RESOLVE INDOUBT ENTRY(S) ARE OUTSTANDING FOR SUBSYSTEM *subsystem-identifier*

Explanation

The *subsystem-identifier* subsystem has remaining indoubt entries after the IMS/TM subsystem has attempted to resolve the work units that are indoubt. This message is sent to the IMS/TM master terminal operator (MTO).

System action

The connection between the Db2 and IMS/TM subsystems remains active, and applications can access Db2 resources.

Operator response

Notify the system programmer.

System programmer response

Use the DISPLAY THREAD and RECOVER INDOUBT commands to display and resolve the work units that are indoubt.

Problem determination

Recovery information is available on the Db2 log and IMS/TM log to assist in the resolution of the work unit(s) indoubt. For each indoubt work unit, an IMS/TM attachment facility snap record (code X'5501FE') is written to the IMS/TM log.

Related tasks
Resolving indoubt units of recovery (Db2 Administration Guide)
Related reference
-DISPLAY THREAD (Db2) (Db2 Commands)
-RECOVER INDOUBT (Db2) (Db2 Commands)

DSNM005I IMS/TM RESOLVE INDOUBT PROTOCOL PROBLEM WITH SUBSYSTEM *subsystem-name*

Explanation

The specified subsystem has protocol incompatibilities withIMS TM. The Db2 resolve indoubt process received an unknown or invalid recovery request (RRE) fromIMS TM. The request was rejected by Db2 and kept byIMS TM.

subsystem-name
The name of the subsystem.

All DSNM messages are sent to the IMS master terminal operator (MTO) and to the appropriate MVS console.

System action

The connection between the Db2 andIMS TM subsystems remains active, and applications can access Db2 resources.

Operator response

Notify the system programmer.

System programmer response

Call IBM Support after extracting from theIMS TM log theIMS TM attachment facility snap records (code X'5501FE') using theIMS TM utility DFSERA10.

These records contain the complete request fromIMS TM to Db2, the request type is at offset X'01C', this is a four-character identifier which should contain any of the following words:

- 'SHOW'
- 'IDBT'
- 'COMM'
- 'ABRT'

If theIMS TM recovery request (RRE) found in the log is an invalid one, (not 'COMM' or 'ABRT'), you may manually delete it using the IMS/TM/CHANGE SUBSYS RESET command after consulting with the IBM Software Support.

If theIMS TM request is a valid one (abort or commit), you must find the action thatIMS TM performed for that RRE by locating the X'3730' (commit) or X'3801' (abort) record in theIMS TM log and perform the same action under Db2 by using the -RECOVER INDOUBT command.

Problem determination

Recovery information is available on the Db2 log and IMS log to assist in the resolution of the problem. For each indoubt work unit, anIMS TM attachment facility snap record (code X'5501FE') is written to theIMS TM log.

Related tasks

Resolving indoubt units of recovery (Db2 Administration Guide)

Related reference

-RECOVER INDOUBT (Db2) (Db2 Commands)

DSNM100I SUBSYSTEM xxxx NOT AVAILABLE

Explanation

TheIMS TM command facility which routes commands to the Db2 subsystem cannot perform its functions because the Db2 subsystem named 'xxxx' is considered not operational.

System action

The connection to the Db2 subsystem failed for the command. The command is rejected.

System programmer response

If the Db2 subsystem is operational, and if you suspect an error in Db2, you might need to report the problem.For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data). The person entering the request may not be authorized to execute the command. If the Db2 subsystem is not operational, Db2 commands fromIMS TM cannot be processed.

Problem determination

A snap record (X'5501FF') is written to theIMS TM log if a connection request failed.

DSNM104I *xxxx* COMMAND FAILED

Explanation

The Db2 command specified by *xxxx* failed to complete.

System action

The command terminated without providing an output message. Commands will still be allowed by theIMS TM attachment facility.

System programmer response

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Problem determination

If the command failed because of an abend, a snap record (X'5501FF') is written to theIMS TM log and SYS1.LOGREC information is available.

Chapter 11. DSNP messages

Message identifiers that begin with DSNP communicate information about the data space manager.

The DSNP messages contain a connection ID, a correlation ID, and a logical-unit-of-work ID. Messages that have the same connection ID, correlation ID, and logical-unit-of-work ID relate to the same user. This makes it possible to scan a number of DSNP messages and group activities involving a given user.

DSNP001I ***csect-name* - *data-set-name* IS WITHIN *n* BYTES OF AVAILABLE SPACE. RC=*reason-code* CONNECTION-ID=*connection-identifier*, CORRELATION-ID=*correlation-identifier*, LUW-ID=*logical-unit-of-work-id=token***

Explanation

This message warns of an impending space shortage. The data space manager (DSM) extend function CSECT 'DSNPmmmm' detected the space shortage through the use of a 'hedge' quantity *n*. Reason code *reason-code* gives some information about why space could not be obtained.

There might also be some preceding DSM and VSAM messages that can help to determine why space cannot be obtained. The connection, correlation, and logical-unit-of-work IDs identify the user or application that encountered the problem. Correlation IDs beginning with '0*nn*', where *nn*is a number, identify system agents.

A LUW-ID of an asterisk (*) indicates that the thread does not have a LUW-ID. If the LUW-ID is not an asterisk (*), the value is a *logical-unit-of-work identifier* that is assigned to the thread followed by an equals (=) sign and a token value, which can be used in place of logical-unit-of-work-id in any Db2 command that accepts logical-unit-of-work-id as input.

Messages that have the same connection ID, correlation ID, and LUW-ID relate to the same user. This makes it possible to scan a number of DSNP-prefixed messages and group activities involving a given user.

System action

If sufficient space is available for the current request, continue. Otherwise, message DSNP007I follows, and the current SQL request fails.

Operator response

DSM messages are directed to the database administrator (DBA) or system administrator. However, the DBA or system administrator can request that the operator issue an MVS WRITELOG operator command (for example, 'W A') to obtain MVS SYSLOG output. The SYSLOG sometimes contains media manager messages that might be helpful to the DBA or system administrator in determining why space could not be allocated.

System programmer response

Based on the reason code (RC) in the message, as well as information that might be available in access method services or VSAM messages preceding this one, try one of the following solutions:

- If you do not anticipate further extension of this table space or index, ignore the message.
- If the table space or index is backed by storage group-defined data sets and this data set is not at maximum extents, use the ALTER STOGROUP statement to add volumes to the storage group (up to 133 of them).
- If the table space or index is backed by 'user-defined' data sets, and not at maximum extents for the data set, issue an ALTER ADDVOLUMES access method services command to provide additional volumes (up to 133 of them). Or, if the table space is nonpartitioned and the high allocated RBA is greater than or equal to 2GB (2,147,483,648) for the indicated data set, define the data set required for the next sequential piece. (Actually, in this case, there should be an indication in console messages or the reason code that the data set required for the next piece was not found.)
- If the data set is at the maximum number of extents, recover or reorganize the table space or index after taking one of the following actions:
  - Enlarge the primary or secondary space allocation quantity of the table space or index.
  - If the Db2 subsystem is running on z/OS V1.7 or later, and the data set is not shared with any z/OS systems at an earlier level, convert the data set to SMS-managed with the Extent Constraint Removal option set to YES in the SMS data class. If you do this, the maximum number of extents is 7257.
- If all of the following conditions are true, the maximum number of extents is 7257:

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  - The z/OS level is V1.7 or later
  - The data set is SMS-managed
  - The Extent Constraint Removal option is set to YES in the associated SMS data class
- If any of the conditions outlined in the previous bullet are not true, the maximum number of extents is:
  - 251 to 255 for non-striped data sets
  - 251 to 255 for each stripe for striped data sets

Problem determination

Examine the console messages, SYS1.LOGREC information, and SYSLOG to determine the reason for the condition. Try to resolve it by the methods described in the Operator Response section of this message. If you feel that this message indicates a problem in an IBM program, you should provide the following sources of information about the problem:

- Console sheet showing the message and related messages that might precede or follow it.
- System log printout (obtained via MVS WRITELOG operator command) showing related VSAM/media manager messages that might appear there (usually needed only if you have a message or reason code that indicates a media manager services problem occurred).
- Integrated catalog facility (ICF) catalog listing showing characteristics of the data set in question and of the ICF catalog itself.
- VTOC listing of packs associated with the request, showing space available for data sets, catalogs, VTOC index, and the VTOC itself, as well as data set extent information.
- Any associated dumps.
- SYS1.LOGREC listing showing entries at or near the time of the problem (unless these appear in an associated dump).
- Depending on the reason code, the results of certain SQL SELECT operations on Db2 catalog tables may be needed.

Related concepts

Primary space allocation (Db2 Administration Guide)

Example of primary and secondary space allocation (Db2 Administration Guide)

Related tasks

Extending user-managed data sets (Db2 Administration Guide)

Extending a data set (Db2 Administration Guide)

Letting SMS manage your Db2 storage groups (Db2 Administration Guide)

DSNP002I ***csect* - DEFINE FAILED FOR *data-set-name* RC=*reason-code* CONNECTION-ID=*connection-id*, CORRELATION-ID=*correlation-id*, LUW-ID=*logical-unit-of-work-id* =*token***

Explanation

Data set definition failed (in CSECT 'DSNP*mmmm*') for the reason identified by RC. The connection ID, correlation ID, and logical-unit-of-work ID (LUW-ID) identify the user or application that encountered the problem. The connection, correlation, and logical-unit-of-work IDs identify the user or application that encountered the problem. Correlation IDs beginning with '0nn', where 'nn' is a number, identify system agents.

A LUW-ID of '*' indicates that the thread does not have a LUW-ID. If the LUW-ID is not an '*', the value is a logical-unit-of-work-id that is assigned to the thread followed by an '=' sign and a token value, which can be used in place of logical-unit-of-work-id in any Db2 command that accepts logical-unit-of-work-id as input.

Messages that have the same connection ID, correlation ID, and LUW-ID relate to the same user. This makes it possible to scan a number of DSNP-prefixed messages and group activities involving a given user.

System action

The data space manager (DSM) terminates its actions associated with the current SQL request. Higher level functions might terminate the current SQL request or the unit of recovery that issued the request.

Operator response

This message is directed to either the database administrator or the system administrator. Bring the message to their attention if it appears on the MVS operator's console. The installation should consider directing Db2 messages to a console other than the operator's console.

System programmer response

Investigate the problem indicated by the reason code and preceding access method services messages, if any, and correct it, if possible. If an out-of-space condition exists, see the description of message DSNP001I for actions to consider.

Problem determination

See Problem Determination of message DSNP001I for this information.

Related concepts

Db2 reason codes (Db2 Codes)

Related information

DSNP001I

csect-name - *data-set-name* IS WITHIN *n* BYTES OF AVAILABLE SPACE. RC=*reason-code* CONNECTION-ID=*connection-identifier*, CORRELATION-ID=*correlation-identifier*, LUW-ID=*logical-unit-of-work-id=token*

DSNP003I ***csect* - RESET FAILED FOR *data-set-name*. RC=*rrrrrrrr* CONNECTION-ID=*xxxxxxxx*, CORRELATION-ID=*yyyyyyyyyyyy*, LUW-ID=*logical-unit-of-work-id=token***

Explanation

Reset, a data space manager (DSM) function invoked by Db2 utilities, failed in CSECT 'DSNPmmmm' for the reason identified by RC. The connection ID, correlation ID, and logical-unit-of-work ID (LUW-ID) identify the user or application that encountered the problem. Correlation IDs beginning with '0*nn*', where '*nn*' is a number, identify system agents.

A LUW-ID of '*' indicates that the thread does not have a LUW-ID. If the LUW-ID is not an '*', the value is a logical-unit-of-work-id that is assigned to the thread followed by an '=' sign and a token value, which can be used in place of logical-unit-of-work-id in any Db2 command that accepts logical-unit-of-work-id as input.

Messages that have the same connection ID, correlation ID, and LUW-ID relate to the same user. This makes it possible to scan a number of DSNP-prefixed messages and tie together activities involving a given user.

System action

DSM terminates its actions associated with the current SQL request. Higher level functions might terminate the current SQL request or the unit of recovery that issued the request.

Operator response

This message is directed to the database administrator or the system administrator. Bring it to that person's attention if it appears on the MVS operator's console. The installation should consider directing Db2 messages to a console other than the operator's console.

System programmer response

Investigate the problem indicated by the reason code and preceding Db2, access method services, or VSAM messages, if any, and correct it, if possible.

It might be necessary to delete and redefine the data set using access method services. Consider making a backup copy before doing this. (Use Db2 utilities to make the copy; in general, VSAM utilities do not work on Db2database services data sets.)

Problem determination

See Problem Determination for message DSNP001I for this information.

Related concepts

Db2 reason codes (Db2 Codes)

Related information

DSNP001I

csect-name - *data-set-name* IS WITHIN *n* BYTES OF AVAILABLE SPACE. RC=*reason-code* CONNECTION-ID=*connection-identifier*, CORRELATION-ID=*correlation-identifier*, LUW-ID=*logical-unit-of-work-id=token*

DSNP004I ***csect* - DELETE FAILED FOR *data-set-name*. RC=*reason-code* CONNECTION-ID=*connection-id*, CORRELATION-ID=*correlation-id*, LUW-ID=*logical-unit-of-work-id=token***

Explanation

Deletion failed in CSECT 'DSNP*mmmm*' for the reason identified by the RC=*reason-code* value. The connection ID, correlation ID, and logical-unit-of-work ID (LUW-ID) identify the user or application that encountered the problem. Correlation IDs beginning with '0nn', where 'nn' is a number, identify system agents.

The value of the LUWID is a logical-unit-of-work-id that is assigned to the thread followed by an '=' sign and a token value, which can be used in place of logical-unit-of-work-id in any Db2 command that accepts logical-unit-of-work-id as input.

Messages that have the same connection ID, correlation ID, and LUWID relate to the same user. This makes it possible to scan a number of DSNP-prefixed messages and group activities involving a given user.

System action

Db2 terminates its actions associated with the current SQL request. Db2 might terminate the current SQL request or the unit of recovery that issued the request.

Operator response

This message is directed to the database administrator or the system administrator. Bring it to that person's attention if it appears on the MVS operator's console. The installation should consider directing Db2 messages to a console other than the operator's console.

System programmer response

Investigate the problem indicated by the reason code and preceding access method services messages if any, and correct it, if possible. Check the data set and delete it by using access method services directly if reasonable to do so. Consider making a backup copy before doing this. (Use Db2 utilities to make the copy; in general, VSAM utilities do not work on Db2 data sets.)

Problem determination

See Problem Determination for message DSNP001I for this information.

Severity

8 (error)

Related concepts

Db2 reason codes (Db2 Codes)

Related information

DSNP001I

csect-name - *data-set-name* IS WITHIN *n* BYTES OF AVAILABLE SPACE. RC=*reason-code* CONNECTION-ID=*connection-identifier*, CORRELATION-ID=*correlation-identifier*, LUW-ID=*logical-unit-of-work-id=token*

DSNP005I ***csect* - COULD NOT REMOVE EXCESS VOLUMES FROM CANDIDATE LIST OF *data-set-name* CONNECTION-ID=*xxxxxxxx*, CORRELATION-ID=*yyyyyyyyyyyy*, LUW-ID=*logical-unit-of-work-id=token***

Explanation

Volumes from a storage group were entered in the data set's candidate list and could not be removed by CSECT 'DSNPmmmm' after some data space manager (DSM) operation. The connection ID, correlation ID, and logical-unit-of-work ID (LUW-ID) identify the user or application that encountered the problem. Correlation IDs beginning with '0nn', where 'nn' is a number, identify system agents.

A LUW-ID of '*' indicates that the thread does not have a LUW-ID. If the LUW-ID is not an '*', the value is a logical-unit-of-work-id that is assigned to the thread followed by an '=' sign and a token value, which can be used in place of logical-unit-of-work-id in any Db2 command that accepts logical-unit-of-work-id as input.

Messages that have the same connection ID, correlation ID, and LUW-ID relate to the same user. This makes it possible to scan a number of DSNP-prefixed messages and group activities involving a given user.

This is not a major problem. However, the data set will not properly reflect subsequent deletions from the volume list in its storage group (via ALTER STOGROUP command in SQL), because the data set's integrated catalog facility (ICF) catalog entry still contains the volume serial numbers.

If needed, the storage group in question can be identified by issuing an SQL SELECT to get information about the table space or index that is identified by the third and fourth qualifiers (database name, table space name) in the data set name.

System action

Operation continues.

Operator response

This message is directed to the database administrator or the system administrator. Bring it to that person's attention if it appears on the MVS operator's console. The installation should consider directing Db2 messages to a console other than the operator's console.

System programmer response

Look for associated DSM and access method services messages preceding this one to get additional information. Attempt an ALTER REMOVEVOLUMES access method services command, if appropriate, after issuing a LISTCAT to see which volumes are recorded as 'candidate' in the integrated catalog facility (ICF) catalog.

Problem determination

See Problem Determination for message DSNP001I for this information. (However, there should not be a need for VTOC or SYSLOG information for this case.)

DSNP006I ***csect* - REQUIRED STOGROUP DEFINED DATA SET NOT AVAILABLE- *data-set-name* RC=*rrrrrrrr* CONNECTION-ID=*xxxxxxxx*, CORRELATION-ID=*yyyyyyyyyyyy*, LUW-ID=*logical-unit-of-work-id=token***

Explanation

An attempt to alter the shareoptions of this data set failed. The data set could not be accessed for the reason indicated by RC. The connection ID, correlation ID, and logical-unit-of-work ID (LUWID) identify the user or application that encountered the problem. Correlation IDs beginning with '0nn', where 'nn' is a number, identify system agents.

The value of the LUWIDis a logical-unit-of-work-id that is assigned to the thread followed by an '=' sign and a token value, which can be used in place of the logical-unit-of-work-id in any Db2 command that accepts the logical-unit-of-work-id as input.

Messages having the same connection ID, correlation ID, and LUWID relate to the same user. This makes it possible to scan a number of DSNP-prefixed messages and group activities involving a given user.

System action

Db2 terminates its actions associated with the current SQL request. Db2 might terminate the current SQL request or the unit of recovery that issued the request.

Operator response

This message is directed to the database administrator or the system administrator. Bring it to that person's attention if it appears on the MVS operator's console. The installation should consider directing Db2 messages to a console other than the operator's console.

System programmer response

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Problem determination

See Problem Determination for message DSNP001I for this information.

Severity

8 (error)

Related concepts

Db2 reason codes (Db2 Codes)

Related information

DSNP001I

csect-name - *data-set-name* IS WITHIN *n* BYTES OF AVAILABLE SPACE. RC=*reason-code* CONNECTION-ID=*connection-identifier*, CORRELATION-ID=*correlation-identifier*, LUW-ID=*logical-unit-of-work-id=token*

DSNP007I ***csect-name* - EXTEND FAILED FOR *data-set-name*. RC=*reason-code* CONNECTION-ID=*connection-id*, CORRELATION-ID=*correlation-id*, LUW-ID=*logical-unit-of-work-id* = *token***

Explanation

Extension failed in control section DSNP*mmmm* of the data space manager (DSM). The *data-set-name* value identifies the data set that is being extended. The *reason-code* value is the reason code, which indicates why the extend process failed. The *connection-id*, *correlation-id*, and *logical-unit-of-work-id* values identify the user or application that encountered the problem. Correlation identifiers begin with '0*nn*', where *nn* is a number that identifies system agents.

When the *logical-unit-of-work-id* value is '*' (asterisk) the thread does not have a LUWID. If the *logical-unit-of-work-id* value is not '*', the *logical-unit-of-work-id* value is a logical unit of work identifier (LUWID) that is assigned to the thread, followed by an '=' (equal sign) and a *token* value, which can be used in place of the LUWID in any Db2 command that accepts the LUWID value as input.

Messages that have the same *connection-id*, *correlation-id*, and *logical-unit-of-work-id* values relate to the same user. This situation makes it possible to scan a number of DSNP-prefixed messages and group activities involving a given user.

System action

The DSM terminates its actions associated with this extend request. Higher level functions might terminate if they cannot continue without a successful extend. In this case, additional console messages and/or SQL codes are produced. In other cases, higher level functions might be able to resolve the space need without the extend, so they continue normally.

Operator response

See Operator Response for message DSNP001I for this information.

System programmer response

The following sources of information are available to help determine the cause of the failure:

- See the Programmer Response for message DSNP001I.
- Analyze the *reason-code* value in conjunction with the console messages.
- The reason code might apply to the data set identified in the message or to another data set that is needed for the extend process. If the reason code indicates a data set access failure, the console messages indicate the data set name. For example, if the RC indicates 'resource unavailable', console messages identify the resource that is unavailable. Most likely, the message is DSNT500I.
- Retrieve diagnostic information from the output of the `DISPLAY DB...RESTRICT` or `DISPLAY UTIL(*)...` commands.
- For information about finding the system diagnostic work area (SDWA), see The system diagnostic work area (SDWA) (Diagnosing Db2 problems).

Problem determination

See Problem Determination for message DSNP001I.

Related concepts

DSNP messages
Message identifiers that begin with DSNP communicate information about the data space manager.

Db2 reason codes (Db2 Codes)

Recovery of catalog and directory tables (Db2 Administration Guide)

Related tasks

Using disk space effectively (Db2 Performance)

Improving the performance of sort processing (Db2 Performance)

Recovering catalog and directory objects (Db2 Utilities)

Displaying threads by LUWID (Db2 Administration Guide)

Related reference

Db2 catalog tables (Db2 SQL)

-DISPLAY UTILITY (Db2) (Db2 Commands)

-DISPLAY DATABASE (Db2) (Db2 Commands)

Related information

DSNP001I
csect-name - *data-set-name* IS WITHIN *n* BYTES OF AVAILABLE SPACE. RC=*reason-code* CONNECTION-ID=*connection-identifier*, CORRELATION-ID=*correlation-identifier*, LUW-ID=*logical-unit-of-work-id=token*

DSNP008I *csect-name*- REQUIRED USER-DEFINED DATA SET NOT AVAILABLE-*data-set-name* RC=*reason-code* CONNECTION-ID=*connection-id*, CORRELATION-ID=*correlation-id*, LUW-ID=*logical-unit-of-work-id=token*

Explanation

One of the following actions applied against user-defined data sets failed in CSECT 'DSNP*mmmm*' of the data space manager (DSM):

- Create table space or index
- Extend table space or index
- Process the SQL ALTER DATABASE statement
- Process the REORG TABLESPACE utility with SHRLEVEL REFERENCE or CHANGE

Correlation IDs beginning with '0nn', where 'nn' is a number, identify system agents.

One or more of the data sets could not be accessed for the reason indicated by RC. The connection ID, correlation ID, and logical-unit-of-work ID (LUWID) identify the user or application that encountered the problem.

The value of the LUWID is alogical-unit-of-work-id that is assigned to the thread followed by an '=' sign and a token value, which can be used in place of logical-unit-of-work-id in any Db2 command that accepts logical-unit-of-work-id as input.

Messages having the same connection ID, correlation ID, and LUWID relate to the same user. This makes it possible to scan a number of DSNP-prefixed messages and group activities involving a given user.

If the name of the data set in the message is different from the name of the original data set (for example, '....A002' instead of '...A001'), a new data set might need to be created. A different name indicates that the original data set exceeded its limit.

System action

Db2 terminates its actions associated with the current SQL request or utility. Db2 might terminate the current SQL request or utility or the unit of recovery that issued the request.

Operator response

This message is directed to the database administrator or the system administrator. Bring it to that person's attention if it appears on the MVS operator's console. The installation should consider

directing Db2 messages to a console other than the operator's console.

System programmer response

The return code description might indicate that one of the following actions needs to be performed or it indicates the necessary steps:

- If the data set does not exist, create it before attempting the create table space/index or extend data set again.
- If the data set shareoptions are incorrect, modify the shareoptions with access method services (AMS).
- The appropriate AMS command is ALTER SHAREOPTIONS.

Problem determination

See Problem Determination for message DSNP001I for this information.

Severity

8 (error)

Related concepts

Db2 reason codes (Db2 Codes)

Related information

DSNP001I

DSNP009I	**THE FOLLOWING ERROR MESSAGES WERE RECEIVED FOR *operation* ON *data-set-name***
DSNP010I	**END OF ERROR MESSAGES. CONNECTION-ID=*xxxxxxxx*, CORRELATION-ID=*yyyyyyyyyyyy*, LUW-ID=*logical-unit-of-work-id=token***

Explanation

Messages DSNP009I and DSNP010I enclose a block of messages that are received by the data space manager (DSM) subcomponent of Db2 in response to an access method services (AMS) operation.

operation
The access method services operation that was being performed.

data-set-name
The data set on which the operation was being performed.

The prefix of the messages in the block is usually IDC (access method services messages). However, the prefix can also be IKJ (dynamic allocation) or other system subcomponent IDs. Refer to the appropriate MVS publication for descriptions of the enclosed messages.

The operation can be DEFINE CLUSTER, ALTER ADDVOLUMES, ALTER REMOVEVOLUMES, ALTER NEWNAME, or DELETE CLUSTER. One or more other DSM messages follow this message to explain what happened as a result of the failure of this access method services request. The connection ID, correlation ID, and logical-unit-of-work ID (LUW-ID) identify the user or application that encountered the problem.

A LUW-ID of '*' indicates that the thread does not have a LUW-ID. If the LUW-ID is not an '*', the value is a logical-unit-of-work-id that is assigned to the thread followed by an '=' sign and a token value, which can be used in place of logical-unit-of-work-id in any Db2 command that accepts logical-unit-of-work-id as input.

Messages that have the same connection ID, correlation ID, and LUW-ID relate to the same user. This makes it possible to scan a number of DSNP-prefixed messages and group activities involving a given user. Correlation IDs beginning with '0nn', where 'nn' is a number, identify system agents.

System action

Operation continues.

Operator response

This message is directed to the database administrator or the system administrator. Bring it to that person's attention if it appears on the MVS operator's console. The installation should consider directing Db2 messages to a console other than the operator's console.

System programmer response

Use this information to help resolve problems indicated by other DSM messages that follow this one.

Problem determination

See Problem Determination for message DSNP001I for this information.

DSNP011I	***csect-name* - MEDIA MANAGER SERVICES ERROR FOR *data-set-name*. MMRC=*cccccccc* DSMRC=*ffffffff* CONNECTION-ID=*connection-id*, CORRELATION-**

ID=*correlation-id*, LUW-ID=*logical-unit-of-work-id =token*

Explanation

The MMRC is the return code that Db2 received from media manager services. Refer to the appropriate MVS publication for a description of these codes. DSMRC is a DSM reason code that indicates which of the media manager services functions, update or extend, failed. The message is from CSECT 'DSNP*mmmm*' of the data space manager (DSM). The connection ID, correlation ID, and logical-unit-of-work ID (LUW-ID) identify the user or application that encountered the problem. Correlation IDs beginning with '0*nn*', where *nn* is a number, identify system agents.

A LUW-ID of '*' indicates that the thread does not have a LUW-ID. If the LUW-ID is not an '*', the value is a logical-unit-of-work-id that is assigned to the thread followed by an '=' sign and a token value, which can be used in place of logical-unit-of-work-id in any Db2 command that accepts logical-unit-of-work-id as input.

Messages that have the same connection ID, correlation ID, and LUW-ID relate to the same user. This makes it possible to scan a number of DSNP-prefixed messages and group activities involving a given user.

System action

The DSM terminates its actions associated with the current SQL request. Higher level functions might terminate the current SQL request or the unit of recovery that issued the request.

Operator response

DSM messages are directed to either the database administrator (DBA) or the system administrator. However, they can request that the operator issue an MVS WRITELOG operator command (for example, 'W A') to obtain MVS SYSLOG output. The SYSLOG sometimes contains media manager messages that might be helpful to the DBA or system administrator in determining why space could not be allocated.

System programmer response

This message might be preceded by one or more IEC or ICY messages on the console or in SYSLOG. These messages help to determine what happened and what action to take.

Problem determination

See Problem Determination for message DSNP001I for this information.

Related concepts

Db2 reason codes (Db2 Codes)

Related information

DSNP001I

csect-name - *data-set-name* IS WITHIN *n* BYTES OF AVAILABLE SPACE. RC=*reason-code* CONNECTION-ID=*connection-identifier*, CORRELATION-ID=*correlation-identifier*, LUW-ID=*logical-unit-of-work-id=token*

DSNP012I ***csect* - ERROR IN ICF CATALOG LOCATE FUNCTION FOR *data-set-name* CTLGRC=*cc* CTLGRSN=*zzzzrrss* CONNECTION-ID=*xxxxxxxx*, CORRELATION-ID=*yyyyyyyyyyyy*, LUW-ID=*luw-id***

Explanation

csect-name
The name of the control section that issued the message.

data-set-name
The name of the data set

cc
The return code that Db2 received from an SVC 26 call (ICF catalog locate function).

zzzzrrss
The reason code that Db2 received from an SVC 26 call (ICF catalog locate function). The reason code is in the same format as that returned to Db2 by the SVC 26 call.

If *cc* is 4 or 8, the reason code is associated with access method services message IDC3009I. To determine the name of the CSECT that set the reason code, convert *zzzz* from hexadecimal to EBCDIC, and append the resulting 2 characters to 'IGG0CL'. For example, suppose that *zzzz* is C6C6. The EBCDIC equivalent of X'C6C6' is 'FF', so the CSECT that set the reason code is IGG0CLFF.

rr is the hexadecimal equivalent of the reason code value that is documented in access method services message IDC3009I. *ss* is the hexadecimal equivalent of the return code value that is documented in access method services message IDC3009I. (The return code follows the reason code.) Convert *rr* and *ss* to decimal. Then, see the description of IDC3009I for explanations of the reason code and return code. For example, suppose that *rrss* is 0532. The decimal equivalent of X'32' is 50, and the decimal equivalent of X'05' is 5. Therefore, in IDC3009I, you need to look up a return code of 50 and a reason code of 5.

If CTLGRC=AAAAAA08 and CTLGRSN=AAAAAA08, *zzzzrrss* is not associated with access method

services message IDC3009I. AAAAAA08 indicates that the specified data set is not in the ICF catalog.

xxxxxxxx
The connection ID for the user or application that encountered the problem.

yyyyyyyyyyyy
The correlation ID for the user or application that encountered the problem.

Correlation IDs that begin with '0*nn*', where *nn* is a number, identify system agents.

luw-id
The logical unit of work (LUW) ID for the user or application that encountered the problem.

An LUW ID with an asterisk (*) indicates that the thread does not have an LUW ID. If the LUW ID is not an asterisk (*), the value is an LUW ID that is assigned to the thread followed by an equals sign (=) and a token value. (The token value can be used in place of the LUW ID in any Db2 command that accepts an LUW ID as input.)

Messages that have the same connection ID, correlation ID, and LUW ID relate to the same user. This situation makes it possible to scan a number of DSNP messages and group activities that involve a particular user.

System action

Db2 terminates its actions that are associated with the current SQL request. Higher-level functions might terminate the current SQL request or the unit of recovery that issued the request.

System programmer response

Correct the problem that is indicated by the catalog return and reason codes.

Problem determination

See Problem Determination for message DSNP001I for this information.

Related reference
Message IDC3009I (MVS System Messages)
Related information
DSNP001I
csect-name - *data-set-name* IS WITHIN *n* BYTES OF AVAILABLE SPACE. RC=*reason-code* CONNECTION-ID=*connection-identifier*, CORRELATION-ID=*correlation-identifier*, LUW-ID=*logical-unit-of-work-id=token*

Return Codes from CATALOG (DFSMSdfp Advanced Services)

DSNP013I INSUFFICIENT PRIMARY ALLOCATION SPACE TO FORMAT CONTROL PAGES IN DATA SET *data-set-name* CONNECTION-ID=*xxxxxxxx*, CORRELATION-ID=*yyyyyyyyyyyy*, LUW-ID=*logical-unit-of-work-id =token*

Explanation

Data space manager (DSM) discovered that the primary space quantity given in the data set definition was not large enough. Formatting of required control information in the first several pages was not possible. The connection ID, correlation ID, and logical-unit-of-work ID (LUW-ID) identify the user or application that encountered the problem.

A LUW-ID of '*' indicates that the thread does not have a LUW-ID. If the LUW-ID is not an '*', the value is a logical-unit-of-work-id that is assigned to the thread followed by an '=' sign and a token value, which can be used in place of logical-unit-of-work-id in any Db2 command that accepts logical-unit-of-work-id as input.

Messages that have the same connection ID, correlation ID, and LUW-ID relate to the same user. This makes it possible to scan a number of DSNP-prefixed messages and group activities involving a given user. Correlation IDs beginning with '0nn', where 'nn' is a number, identify system agents.

System action

DSM terminates its actions associated with the current SQL request. Higher level functions might terminate the current SQL request or the unit of recovery that issued the request.

Operator response

This message is directed to the database administrator or the system administrator. Bring it to that person's attention if it appears on the MVS operator's console. The installation should consider directing Db2 messages to a console other than the operator's console.

System programmer response

This should occur only for table spaces or indexes that are not storage group defined. (The Db2 interpreter forces the initial allocation to be large enough if a storage group is used.) Check both the page size specification (4KB or 32KB) and the number of control pages required (2 for table space, 3 for index space). Specify the primary allocation value again so that at

least (pages multiplied by page size) bytes are allocated.

Problem determination

See Problem Determination for message DSNP001I for this information.

DSNP014I **IRLM MANUAL LOCK REQUEST FAILED FOR *data-set-name*. RC=*reason-code*,SC=*subcode*, CONNECTION-ID=*connection-id*, CORRELATION-ID=*correlation-id*, LUW-ID=*logical-unit-of-work-id=token***

Explanation

Db2 requested a manual lock on a data set, but the lock could not be obtained for reasons specified in RC and SC. RC and SC are the return code and reason code from IRLM. The connection ID, correlation ID, and logical-unit-of-work ID (LUW-ID) identify the user or application that encountered the problem.

A LUW-ID of '*' indicates that the thread does not have a LUW-ID. If the LUW-ID is not an '*', the value is a logical-unit-of-work-id that is assigned to the thread followed by an '=' sign and a token value, which can be used in place of logical-unit-of-work-id in any Db2 command that accepts logical-unit-of-work-id as input.

Messages that have the same connection ID, correlation ID, and LUW-ID relate to the same user. This makes it possible to scan a number of DSNP-prefixed messages and group activities involving a given user. DSNP001I or DSNP007I follow this message. Correlation IDs beginning with '0nn', where 'nn' is a number, identify system agents.

If message DSNT376I was received before message DSNP014I, the lock request failed because of a timeout condition. Otherwise, refer to the IRLM return and reason codes for an explanation of the failure.

System action

The current SQL or the unit of recovery that issued the request might be terminated.

Operator response

This message is directed to the database administrator or the system administrator. Bring it to that person's attention if it appears on the MVS operator's console. The installation should consider directing Db2 messages to a console other than the operator's console.

System programmer response

Investigate the problem indicated by the IRLM return and reason code.

Problem determination

Provide the console sheet and a dump. A GTF trace might also be required. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data). Refer to the explanation section of this message for additional problem determination information.

Related concepts

IRLM return and reason codes (IRLM)

Related information

DSNP001I

DSNP007I

DSNT376I

DSNP015I ***csect* - IRLM MANUAL UNLOCK REQUEST FAILED FOR *data-set-name*. RC=*reason-code*,SC=*sub-code*, CONNECTION-ID=*connection-id*, CORRELATION-ID=*correlation-id*, LUW-ID=*logical-unit-of-work-id=token***

Explanation

Db2 requested a manual unlock on a data set, but the unlock could not be performed for reasons specified in RC and SC. The connection ID, correlation ID, and logical-unit-of-work ID (LUW-ID) identify the user or application that encountered the problem.

A LUW-ID of '*' indicates that the thread does not have a LUW-ID. If the LUW-ID is not an '*', the value is a logical-unit-of-work-id that is assigned to the thread followed by an '=' sign and a token value, which can be used in place of logical-unit-of-work-id in any Db2 command that accepts logical-unit-of-work-id as input.

Messages that have the same connection ID, correlation ID, and LUW-ID relate to the same user. This makes it possible to scan a number of DSNP-prefixed messages and group activities involving a given user. Correlation IDs beginning with '0nn', where 'nn' is a number, identify system agents.

System action

The current SQL or the unit of recovery that issued the request might be terminated.

Operator response

This message is directed to the database administrator or the system administrator. Bring it to that person's attention if it appears on the MVS operator's console. The installation should consider directing Db2 messages to a console other than the operator's console.

System programmer response

Investigate the problem indicated by the IRLM return and reason code.

Problem determination

Provide the console sheet and a dump. A GTF trace might also be required. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data). See the explanation section of this message for additional problem determination information.

Related concepts

IRLM return and reason codes (IRLM)

DSNP016I **CREATE FAILED FOR *pageset-name*. RC=*rrrrrrrr* CONNECTION-ID=*xxxxxxxx*, CORRELATION-ID=*yyyyyyyyyyyy*, LUW-ID=*logical-unit-of-work-id =token***

Explanation

Creation of a table space or index space failed in the data space manager (DSM) for the reason given in RC. The format of the *pageset-name* value is *dbname.tiname.instance*, where *dbname* is the database name and *tiname* is the table space or index space name.

This message identifies the function that was in progress at the time of a failure. The specific failure is usually identified by a preceding message. The connection ID, correlation ID, and logical-unit-of-work ID (LUW-ID) identify the user or application that encountered the problem.

A LUW-ID of '*' indicates that the thread does not have a LUW-ID. If the LUW-ID is not an '*', the value is a logical-unit-of-work-id that is assigned to the thread followed by an '=' sign and a token value, which can be used in place of logical-unit-of-work-id in any Db2 command that accepts logical-unit-of-work-id as input.

Messages that have the same connection ID, correlation ID, and LUW-ID relate to the same user. This makes it possible to scan a number of DSNP-prefixed messages and group activities involving a given user. Correlation IDs beginning with '0nn', where 'nn' is a number, identify system agents.

System action

DSM terminates its actions associated with the current SQL request. Higher level functions might terminate the current SQL request or the unit of recovery that issued the request.

Operator response

This message is directed to the database administrator or the system administrator. Bring it to that person's attention if it appears on the MVS operator's console. The installation should consider directing Db2 messages to a console other than the operator's console.

System programmer response

Investigate the problem indicated by reason code and preceding messages, and correct it, if possible.

Problem determination

See Problem Determination for message DSNP001I for this information.

Related concepts

Db2 reason codes (Db2 Codes)

Related information

DSNP001I

csect-name - data-set-name IS WITHIN *n* BYTES OF AVAILABLE SPACE. RC=*reason-code* CONNECTION-ID=*connection-identifier*,

CORRELATION-ID=*correlation-identifier*, LUW-ID=*logical-unit-of-work-id=token*

DSNP017I **RESET FAILED FOR *pageset-name*. RC=*reason-code* CONNECTION-ID=*connection-id*, CORRELATION-ID=*correlation-id*, LUW-ID=*logical-unit-of-work-id =token***

Explanation

Reset failed in the data space manager (DSM) subcomponent of Db2 for a table space or index space for the reason that is indicated by the RC=*reason-code* value.) The format of the *pageset-name* value is *dbname.tiname*, where *dbname* is the database name and *tiname* is the table space or index space name.

This message identifies the function that was in progress at the time of a failure. The specific failure is usually identified by a preceding message. The connection ID, correlation ID, and logical-unit-of-work ID (LUW-ID) identify the user or application that encountered the problem.

A LUW-ID of '*' indicates that the thread does not have a LUW-ID. If the LUW-ID is not an '*', the value is a logical-unit-of-work-id that is assigned to the thread followed by an '=' sign and a token value, which can be used in place of logical-unit-of-work-id in any Db2 command that accepts logical-unit-of-work-id as input.

Messages that have the same connection ID, correlation ID, and LUW-ID relate to the same user. This makes it possible to scan a number of DSNP-prefixed messages and group activities involving a given user. Correlation IDs beginning with '0nn', where 'nn' is a number, identify system agents.

System action

DSM terminates its actions associated with the current SQL request. Higher level functions might terminate the current SQL request or the unit of recovery that issued the request.

Operator response

This message is directed to the database administrator or the system administrator. Bring it to that person's attention if it appears on the MVS operator's console. The installation should consider directing Db2 messages to a console other than the operator's console.

System programmer response

Investigate the problem indicated by the reason code and preceding messages, and correct it, if possible.

Problem determination

See Problem Determination for message DSNP001I for this information.

Related concepts

Db2 reason codes (Db2 Codes)

Related information

DSNP001I

csect-name - data-set-name IS WITHIN *n* BYTES OF AVAILABLE SPACE. RC=*reason-code* CONNECTION-ID=*connection-identifier*, CORRELATION-ID=*correlation-identifier*, LUW-ID=*logical-unit-of-work-id=token*

DSNP018I **DROP FAILED FOR *pageset-name*. RC=*reason-code* CONNECTION-ID=*connection-id*, CORRELATION-ID=*correlation-id*, LUW-ID=*logical-unit-of-work-id =token***

Explanation

Drop failed in the data space manager (DSM) subcomponent of Db2 for a table space or index space for the reason given in RC. The format of the *pageset-name* value is *dbname.tiname*, where *dbname* is the database name and *tiname* is the table space or index space name. This message identifies the function that was in progress at the time of a failure. The specific failure is usually identified by a preceding message. The connection ID, correlation ID, and logical-unit-of-work ID (LUW-ID) identify the user or application that encountered the problem.

A LUW-ID of '*' indicates that the thread does not have a LUW-ID. If the LUW-ID is not an '*', the value is a logical-unit-of-work-id that is assigned to the thread followed by an '=' sign and a token value, which can be used in place of logical-unit-of-work-id in any Db2 command that accepts logical-unit-of-work-id as input.

Messages that have the same connection ID, correlation ID, and LUW-ID relate to the same user. This makes it possible to scan a number of DSNP-prefixed messages and group activities involving a given user. Correlation IDs beginning with '0nn', where 'nn' is a number, identify system agents.

System action

DSM terminates its actions associated with the current SQL request. Higher level functions might terminate the current SQL request or the unit of recovery that issued the request.

Operator response

This message is directed to the database administrator or the system administrator. Bring it to that person's attention if it appears on the MVS operator's console. The installation should consider directing Db2 messages to a console other than the operator's console.

System programmer response

Investigate the problem indicated by the reason code and preceding messages, and correct it, if possible.

Problem determination

See Problem Determination for message DSNP001I for this information.

Related concepts

Db2 reason codes (Db2 Codes)

Related information

DSNP001I

csect-name - *data-set-name* IS WITHIN *n* BYTES OF AVAILABLE SPACE. RC=*reason-code* CONNECTION-ID=*connection-identifier*, CORRELATION-ID=*correlation-identifier*, LUW-ID=*logical-unit-of-work-id=token*

DSNP019I ***csect-name* - REALLOCATE FAILED FOR *data-set-name*. RC=*reason-code* CONNECTION-ID=*connection-id*, CORRELATION-ID=*correlation-id*, LUW-ID=*logical-unit-of-work-id =token***

Explanation

After a successful ALTER REMOVE VOLUMES request, the data space manager (DSM) subcomponent of Db2 was unable to reallocate the data set for the reason indicated by the RC=*reason-code* value. The connection ID, correlation ID, and logical-unit-of-work ID (LUW-ID) identify the user or application that encountered the problem.

A LUW-ID of '*' indicates that the thread does not have a LUW-ID. If the LUW-ID is not an '*', the value is a logical-unit-of-work-id that is assigned to the thread followed by an '=' sign and a token value, which can be used in place of logical-unit-of-work-id in any Db2 command that accepts logical-unit-of-work-id as input.

Messages that have the same connection ID, correlation ID, and LUW-ID relate to the same user. This makes it possible to scan a number of DSNP-prefixed messages and group activities involving a given user. Correlation IDs beginning with '0nn', where 'nn' is a number, identify system agents.

System action

Operation continues.

Operator response

This message is directed to the database administrator or the system administrator. Bring it to that person's attention if it appears on the MVS operator's console.

System programmer response

The data set and corresponding page set piece or partition can usually continue to be used by the Db2 subsystem. However, they should be stopped and restarted at the earliest possible time in order to synchronize the allocation control blocks with the integrated catalog facility (ICF) catalog volume list.

Problem determination

See Problem Determination for message DSNP001I for this information.

Related concepts

Db2 reason codes (Db2 Codes)

Related tasks

Adding or removing volumes from a Db2 storage group (Db2 Administration Guide)

Related information

DSNP001I

csect-name - *data-set-name* IS WITHIN *n* BYTES OF AVAILABLE SPACE. RC=*reason-code* CONNECTION-ID=*connection-identifier*, CORRELATION-ID=*correlation-identifier*, LUW-ID=*logical-unit-of-work-id=token*

DSNP020I ***csect-name* - USER DEFINED ATTRIBUTES INCORRECT FOR *data-set-name*. RC=*reason-code* CONNECTION-ID=*connection-identifier*, CORRELATION-ID=*correlation-identifier*, LUW-ID=*logical-unit-of-work-id =token***

Explanation

The specified data set was access method services user-defined and does not have the required Db2 attributes. The connection ID, correlation ID, and LUWID values identify the user or application that encountered the problem.

The value of the LUWID is a logical unit of work identifier that is assigned to the thread, followed by an '=' sign and a token value, which can be used in place of 'logical-unit-of-work-id' in any Db2 command that accepts 'logical-unit-of-work-id' as input.

Messages having the same connection ID, correlation ID, and LUWID relate to the same user. This makes it possible to scan a number of DSNP-prefixed messages and group activities involving a given user. Correlation IDs beginning with '0nn', where 'nn' is a number, identify system agents.

System action

No action is taken with the named data set. An error code is returned and a dump is not taken.

Operator response

Notify the system programmer.

System programmer response

Delete the named data set and define it with the correct attributes.

Problem determination

Obtain an access method services LISTCAT for the named data set's attributes.

Severity

8 (error)

Related tasks

Defining data sets (Db2 Administration Guide)

Displaying threads by LUWID (Db2 Administration Guide)

Related reference

Data set naming conventions (Db2 Administration Guide)

DSNP021I ***csect-name*** **EXTEND NOTIFY FAILED FOR** ***data-set-name*****, SC=*****ssssssss*****, NOTESC=*****nnnnnnnn*****, CONNECTION-ID=*****xxxxxxxx*****, CORRELATION-ID=*****yyyyyyyyyyyy*****, LUW-ID=*****logical-unit-of-work-id=token***

Explanation

This is an internal error. The connection ID, correlation ID, and logical-unit-of-work ID (LUW-ID) identify the user or application that encountered the problem.

An LUW-ID of '*' indicates that the thread does not have an LUW-ID. If the LUW-ID is not an '*', the value is a logical-unit-of-work-id that is assigned to the thread followed by an '=' sign and a token value, which can be used in place of the logical-unit-of-work-id in any Db2 command that accepts the logical-unit-of-work-id as input.

Messages that have the same connection ID, correlation ID, and LUW-ID relate to the same user. This makes it possible to scan a number of DSNP-prefixed messages and group activities involving a given user. Correlation IDs beginning with '0nn', where 'nn' is a number, identify system agents.

If message DSNT376I was received before message DSNP021I, the notify request failed because of a timeout condition.

System action

The current SQL statement or the unit of recovery that issued the request might be terminated.

Problem determination

Obtain the console sheet and a dump. A GTF trace might also be required.

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

DSNP022I ***csect-name*** **EXTEND DBET RECORDING FAILED FOR** ***data-set-name*****, RC=*****rrrrrrrr*****, SC=*****ssssssss*****, DBETSC=*****nnnnnnnn*****, CONNECTION-ID=*****xxxxxxxx*****, CORRELATION-ID=*****yyyyyyyyyyyy*****, LUW-ID=*****logical-unit-of-work-id=token***

Explanation

This is an internal error. The connection ID, correlation ID, and logical-unit-of-work ID (LUW-ID) identify the user or application that encountered the problem.

An LUW-ID of '*' indicates that the thread does not have an LUW-ID. If the LUW-ID is not an '*', the value is a logical-unit-of-work-id that is assigned to the thread followed by an '=' sign and a token value, which can be used in place of the logical-unit-of-work-id in any Db2 command that accepts the logical-unit-of-work-id as input.

Messages that have the same connection ID, correlation ID, and LUW-ID relate to the same user. This makes it possible to scan a number of DSNP-prefixed messages and group activities involving a given user. Correlation IDs beginning with '0nn', where 'nn' is a number, identify system agents.

System action

The current SQL statement or the unit of recovery that issued the request might be terminated.

Problem determination

Obtain the console sheet and a dump. A GTF trace might also be required.

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

DSNP026I ***csect-name* DATASET IS NOT ALLOWED TO BE DELETED *data-set-name*, RC=*rrrrrrrr*, CONNECTION-ID=*xxxxxxxx*, CORRELATION-ID=*yyyyyyyyyyyy*, LUW-ID=*logical-unit-of-work-id=token***

Explanation

During clean up of the shadow data set in the final step of online REORG, an error is detected due to an attempt to delete a regular table or index space data set. The connection ID, correlation ID, and logical unit of work ID (LUWID) identify the user or application that encountered the problem. Correlation IDs beginning with '0nn', where 'nn' is a number, identify system agents.

The value of the LUWID is assigned to the thread followed by an '=' sign and a token value, that can be used in place of the LUWID in any Db2 command that accepts it as input.

Messages that have the same connection ID, correlation ID, and LUWID relate to the same user. This makes it possible to scan a number of DSNP-prefixed messages and group activities involving a given user.

System action

No action is taken with the named data set. An error code is returned and a dump is not taken.

Operator response

Notify the system programmer.

System programmer response

Determine the failing environment. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Problem determination

This is an internal error in the online REORG of utility. For more information about this type of error, see message DSNP001I.

Related reference

REORG TABLESPACE (Db2 Utilities)

REORG INDEX (Db2 Utilities)

Related information

DSNP001I

csect-name - *data-set-name* IS WITHIN *n* BYTES OF AVAILABLE SPACE. RC=*reason-code* CONNECTION-ID=*connection-identifier*, CORRELATION-ID=*correlation-identifier*, LUW-ID=*logical-unit-of-work-id=token*

DSNP027I ***csect-name* RENAME FAILED OLD DATASET=*data-set-name*, NEW DATASET=*data-set-name*, RC=*rrrrrrrr*, CONNECTION-ID=*xxxxxxxx*, CORRELATION-ID=*yyyyyyyyyyyy*, LUW-ID=*logical-unit-of-work-id=token***

Explanation

An attempt to alter the data set name failed. The connection ID, correlation ID, and logical unit of work ID (LUWID) identify the user or application that encountered the problem. Correlation IDs beginning with '0nn', where 'nn' is a number, identify system agents.

The value of the LUWID is assigned to the thread followed by an '=' sign and a token value, that can be used in place of the LUWID in any Db2 command that accepts it as input.

Messages that have the same connection ID, correlation ID, and LUWID relate to the same user. This makes it possible to scan a number of DSNP-prefixed messages and group activities involving a given user.

System action

Db2 terminates its actions associated with the current SQL request. Db2 might terminate the current SQL request or the unit of recovery that issued the request.

Operator response

This message is directed to the database administrator or the system administrator. Bring it to that person's attention if it appears on the MVS operator's console. The installation should consider directing Db2 messages to a console other than the operator's console.

System programmer response

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Problem determination

See 'Problem Determination' for message DSNP001I for this information.

Severity

8 (error)

DSNP028I ***csect-name* HSM RECALL FAILED FOR DSNAME = *dsn* HSMRC=*rrrrrrrr*,HSMRSN=*ssssssss* CONNECTION ID=*xxxxxxxx*, CORRELATION ID=*yyyyyyyyyyyy*, LUW-ID=*logical-unit-of-work-id =token***

Explanation

This message indicates that a required data set was migrated by HSM and an attempt to recall the data set failed, preventing Db2 from accessing the data set. The HSMRC and HSMRSN fields can be used to determine the HSM failure. See Problem Determination below. The connection ID, correlation ID, and 'logical-unit-of-work ID' (LUW-ID) identify the user or application that encountered the problem.

A LUW-ID of '*' indicates that the thread does not have a LUW-ID. If the LUW-ID is not an '*', the value is a 'logical-unit-of-work-id' that is assigned to the thread followed by an '=' sign and a token value, which can be used in place of 'logical-unit-of-work-id' in any Db2 command that accepts 'logical-unit-of-work-id' as input.

Messages that have the same connection ID, correlation ID, and LUW-ID relate to the same user. This makes it possible to scan a number of DSNP-prefixed messages and group activities involving a given user. Correlation IDs beginning with '0nn', where 'nn' is a number, identify system agents.

System action

DSM terminates its action with the associated data set. Higher level functions that issued the recall request might terminate.

Operator response

Notify the system programmer.

System programmer response

Investigate the reason for the HSM recall failure. Use the information in this message to help resolve this problem. Additional messages on the MVS operator's console might be associated with this message.

Problem determination

If the HSMRSN is 999, refer to the following list for the explanation:

HSMRC
Description

4
HSM is not active.

8
No storage is available for MWE in CSA.

36
Input MWE is not within user storage.

40
Allocated amount of CSA for MWEs was exceeded.

100
There was an invalid function used.

For all other reason codes (HSMRSN), refer to the *z/OS DFSMShsm Managing Your Own Data* for an explanation of HSM user messages. The HSM user messages can be determined by appending the value in the HSMRC field of this message to ARC1100I (that is, HSMRC=12, HSM message is ARC1112I). The HSMRSN reason code is referenced in the ARC1100I messages.

DSNP030I ***csect-name* THE CURRENT EXTENT REACHES THE LAST VOLUME FOR *data-set-name*. CONNECTION-ID=*xxxxxxxx*, CORRELATION-ID=*yyyyyyyyyyyy*, LUW-ID=*logical-unit-of-work-id=token***

Explanation

This message indicates that the last volume to which the data set *data-set-name* can extend has been reached. You cannot add more volumes if the current volume runs out of space.

The connection, correlation, and logical-unit-of-work IDs identify the user or application that encountered the problem. Correlation IDs beginning with '0nn', where 'nn' is a number, identify system agents.

A LUW-ID of '*' indicates that the thread does not have a LUW-ID. If the LUW-ID is not an '*', the value is a *logical-unit-of-work-id* that is assigned to the thread followed by an '=' sign and a *token* value, which can be used in place of *logical-unit-of-work-id* in any Db2

command that accepts logical-unit-of-work-id as input.

Messages that have the same connection ID, correlation ID, and LUW-ID relate to the same user. This makes it possible to scan a number of DSNP-prefixed messages and group activities involving a given user.

System action

If sufficient space in current volume is available for the current request, Db2 continues. Otherwise, message DSNP007I is issued, and the current SQL request fails.

Operator response

For more information, issue an MVS WRITELOG operator command (for example, 'W A') to obtain MVS SYSLOG output. The SYSLOG sometimes contains VSAM or media manager messages that might be helpful in determining why space could not be allocated.

System programmer response

Depending on what information is available in the access method services or VSAM messages preceding this one, try one of the following:

- If you do not anticipate further extension of this table space or index, ignore the message.
- If the table space or index is backed by SMS-managed data sets, use LISTCAT to choose another SMS storage group that has more space available and recover or reorganize the table space or index into the new SMS storage group.
- If the table space or index is Db2-managed but is not SMS-managed, rearrange the Db2 storage group volume list by shifting volumes with free space or by adding new volumes. Use the SQL statements ALTER STOGROUP ADD VOLUMES and ALTER STOGROUP REMOVE VOLUMES and then recover or reorganize the table space or index.
- If the table space or index is user-managed and not SMS-managed, delete and redefine the data set with more space and then recover or reorganize the table space or index.

Problem determination

Obtain an access method services LISTCAT for the named data set's VOLUME list for current extent space distribution of volumes.

See the Problem Determination section of message DSNP001I for more information.

Severity

0 (informational)

DSNP031I ***csect-name*** **- CURRENT SPACE HAS** ***nn*** **EXTENTS FOR** ***data-set-name*****. THE MAXIMUM EXTENTS IS** ***mm*****. CONNECTION-ID=*****connection-identifier*****, CORRELATION-ID=*****correlation-identifier*****, LUW-ID=*****logical-unit-of-work-id=token***

Explanation

This message indicates that data set *data-set-name* has almost reached the maximum number of extents. The maximum number is indicated by *mm*. You cannot add more volumes if the current volume runs out of space.

The connection, correlation, and logical-unit-of-work IDs identify the user or application that encountered the problem. Correlation IDs beginning with *0nn* (where *nn* is a number) identifies system agents.

A LUW-ID of an asterisk (*) indicates that the thread does not have a LUW-ID. If the LUW-ID is not an asterisk (*), the value is a *logical-unit-of-work-id* that is assigned to the thread followed by an equals sign (=) and a token value, which can be used in place of logical-unit-of-work-id in any Db2 command that accepts *logical-unit-of-work-id* as input.

Messages that have the same connection ID, correlation ID, and LUW-ID relate to the same user. Including all three pieces of information makes it possible to scan a number of DSNP-prefixed messages and group activities involving a given user.

System action

Db2 continues. If the table space or index space is not able to extend when needed, Message DSNP001I is issued and the current SQL request fails.

Operator response

For more information, issue an MVS WRITELOG operator command (for example, 'W A') to obtain MVS SYSLOG output. The SYSLOG sometimes contains VSAM or media manager messages that might be helpful in determining why space could not be allocated.

System programmer response

Based on the information that might be available in the access method services or VSAM messages preceding this one, try one of the following actions:

- If you do not anticipate further extension of this table space or index, ignore the message.
- If the table space or index is Db2-managed and has not yet reached the maximum number of extents, obtain an access method services LISTCAT for the named data set's to see how the extensions are distributed. Your options then include:
  - If there are multiple small extents, you can use the SQL statement ALTER TABLESPACE SECQTY to alter to a larger secondary space allocation quantity.
  - Otherwise, use the ALTER STOGROUP statement to add volumes to the storage group (up to 133 of them).
- If the table space or index is user-managed and has not yet reached the maximum number of extents, issue the access method services command ALTER ADDVOLUMES to provide additional volumes (up to 59 of them).
- If the data set is at the maximum number of extents, recover or reorganize the table space or index after taking one of the following actions:
  - Enlarge the primary or secondary space allocation quantity of the table space or index.
  - If the Db2 subsystem is running on z/OS V1.7 or later, and the data set is not shared with any z/OS systems at an earlier level, convert the data set to SMS-managed with the Extent Constraint Removal option set to YES in the SMS data class. If you do this, the maximum number of extents is 7257.

Problem determination

Obtain an access method services LISTCAT for the named data set's VOLUME list for the extent space distribution.

See the Problem Determination section of message DSNP001I for more information.

Severity

0 (informational)

Related concepts

Primary space allocation (Db2 Administration Guide)

Example of primary and secondary space allocation (Db2 Administration Guide)

Related tasks

Extending user-managed data sets (Db2 Administration Guide)

Extending a data set (Db2 Administration Guide)

Letting SMS manage your Db2 storage groups (Db2 Administration Guide)

Related reference

ALTER TABLESPACE (Db2 SQL)

ALTER STOGROUP (Db2 SQL)

Related information

DSNP001I

csect-name - *data-set-name* IS WITHIN *n* BYTES OF AVAILABLE SPACE. RC=*reason-code* CONNECTION-ID=*connection-identifier*, CORRELATION-ID=*correlation-identifier*, LUW-ID=*logical-unit-of-work-id=token*

Chapter 12. DSNQ messages

Message identifiers that begin with DSNQ communicate information about MQListener.

DSNQ001I **MQListener was invoked with no major function on the command line.**

Explanation

The MQListener command line failed to specify a major function, such as help, run, add, remove, or show.

User response

Consult MQListener documentation and re-run MQListener with the function that was intended. For more information, run:

- db2mqln1/db2mqln2 help

Severity

8 (Error)

DSNQ002I **MQListener was invoked with an unknown command line parameter *parameter-name*.**

Explanation

The MQListener command line contained an unknown parameter *parameter-name*.

User response

Consult MQListener documentation and rerun MQListener with the correct parameters. For more information, run

- db2mqln1/db2mqln2 help

Severity

8 (Error)

DSNQ003I **MQListener was invoked without the required command line parameter *parameter name*.**

Explanation

The MQListener command line was missing the parameter *parameter name*, which was required.

User response

Consult MQListener documentation and re-run MQListener with the parameter that was required. For more information, run

- db2mqln1/db2mqln2 help

Severity

8 (Error)

DSNQ004I **MQListener was invoked with an illegal value for the *parameter name* command line parameter: *parameter value*.**

Explanation

The MQListener command line contained an illegal value for the *parameter name* parameter. The illegal value was *parameter value*.

User response

Consult MQListener documentation and re-run MQListener with the correct parameters. For more information, run

- db2mqln1/db2mqln2 help

Severity

8 (Error)

DSNQ010I **MQListener encountered a database error accessing subsystem *subsystem name* during operation *operation name*: sqlstate = *sqlstate value* (sqlcode = *sqlcode value*).**

Explanation

MQListener encountered a Db2 database error accessing subsystem *subsystem name* while executing operation *operation name*. The resulting sqlstate was *sqlstate value* (sqlcode *sqlcode value*).

User response

Consult MQListener documentation and ensure that MQListener is properly installed in the specified Db2 subsystem and access to MQListener packages and configuration tables ahs been granted to the user running MQListener.

Severity

8 (Error)

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DSNQ011I **MQListener failed to make RRS connection to the subsystem *subsystem name* during operation *operation name*: reason code = *reason code value* (return code = *return code value*).**

Explanation

MQListener encountered a Db2 database error while attempting to connect to subsystem *subsystem name* during operation *operation name*. The resulting reason code was *reason code value* (return code *return code value*).

User response

Ensure that the Db2 subsystem *subsystem name* is active and running.

Severity

8 (Error)

DSNQ012I **MQListener failed to terminate RRS connection from the subsystem *subsystem name* during operation *operation name*: reason code = *reason code value* (return code = *return code value*).**

Explanation

MQListener encountered a Db2 database error while attempting to disconnect from subsystem *subsystem name* during operation *operation name*. The resulting reason code was *reason code value* (return code *return code value*).

User response

Ensure that the Db2 subsystem *subsystem name* is active and running. Consult the Db2 documentation, regarding the exact meaning of the reason and return code.

Severity

4 (Warning)

DSNQ020I **MQListener encountered a MQ error error executing operation *operation name* on object *object name* in queue manager *queue manager name*: reason code = *reason code value*.**

Explanation

MQListener encountered a MQ error error while executing operation *operation name* on object *object name* in queue manager *queue manager name*. The resulting reason code was *reason code value*.

User response

Ensure that MQSeries® is properly installed and configured, and accessible to the user running MQListener. Consult the MQSeries documentation for more information, particularly the Application Programming Reference for more information about the reason code.

Severity

8 (Error)

DSNQ021I **MQListener failed to connect to MQ queue manager *queue manager name*: reason code = *reason code value*.**

Explanation

MQListener encountered a MQ error error while attempting to connect to MQ queue manager *queue manager name*. The resulting reason code was *reason code value*.

User response

Ensure that MQSeries is properly installed and configured, and accessible to the user running MQListener. Consult the MQSeries documentation for more information, particularly the Application Programming Reference for more information about the reason code.

Severity

8 (Error)

DSNQ022I **MQListener failed to disconnect from MQ queue manager *queue manager name*: reason code = *reason code value*.**

Explanation

MQListener encountered a MQ error error while attempting to disconnect from MQ queue manager *queue manager name*. The resulting reason code was *reason code value*.

User response

Ensure that MQSeries is properly installed and running. Consult the MQSeries documentation for

more information, particularly the Application Programming Reference for more information about the reason code.

Severity

4 (Warning)

DSNQ030I **MQListener encountered a DB2 database error attempting to add a new task to the MQListener configuration *configuration name* in the subsystem *subsystem name*. The input queue specified in the task was *input queue name* and the specified queue manager was *queue manager name*. The resulting sqlstate was *sqlstate value* (sqlcode = *sqlcode value*).**

Explanation

MQListener encountered a Db2 database error while attempting to add a new task to the MQListener configuration *configuration name* in the subsystem *subsystem name*. The input queue specified in the task was *input queue name* and the specified queue manager was *queue manager name*. The resulting sqlstate was *sqlstate value* (sqlcode = *sqlcode value*).

User response

Consult MQListener documentation and ensure that MQListener is properly installed in the specified subsystemand and access to MQListener packages and configuration tables has been granted to the user running MQListener. Ensure that the combination of configuration name, input queue, and queue manager is unique among the MQListener configuration tasks in the subsystem. Use MQListener "show" command to inspect the configuration.

Severity

8 (Error)

DSNQ040I **MQListener encountered a DB2 database error retrieving configuration *configuration name* from subsystem *subsystem name* during operation *operation name*. The resulting sqlstate was *sqlstate value* (sqlcode= *sqlcode value*).**

User response

Consult MQListener documentation and ensure that MQListener is properly installed in the specified subsystem and access to MQListener packages and configuration tables has been granted to the user running MQListener.

Severity

8 (Error)

DSNQ060I **MQListener encountered a DB2 database error while removing a task from configuration *configuration name* in subsystem *subsystem name*. The input queue specified was *input queue name* and the queue manager specified was *queue manager name*. The resulting sqlstate was *sqlstate value* (sqlcode = *sqlcode value*).**

Explanation

MQListener encountered a Db2 database error while removing a task from configuration *configuration name* in subsystem *subsystem name*. The input queue that was specified was *input queue name*, and the queue manager that was specified was *queue manager name*. The resulting sqlstate was *sqlstate value* (sqlcode = *sqlcode value*).

User response

Consult MQListener documentation and ensure that MQListener is properly installed in the specified subsystem. Also, ensure that access to MQListener packages and configuration tables has been granted to the user who is running MQListener.

Severity

8 (Error)

DSNQ061I **MQListener attempted to remove an unknown task from configuration *configuration name* in subsystem *subsystem name*. The input queue specified was *input queue name* and the queue manager specified was *queue manager name*.**

Explanation

MQListener attempted to remove an unknown task from configuration *configuration name* in subsystem *subsystem name*. The input queue that was specified was *input queue name* and the queue manager that was specified was *queue manager name*.

User response

Ensure that specified parameters are correct, and re-run MQListener. Use MQListener "show" command to inspect the configuration.

Severity

0 (Informational)

DSNQ070I **MQListener has encountered a DB2 database error preparing to run the stored procedure *schema name*. *procedure name* in subsystem *subsystem name*: sqlstate = *sqlstate value* (sqlcode = *sqlcode value*).**

Explanation

MQListener has encountered a Db2 database error while preparing to run the stored procedure *schema name*. *procedure name* in subsystem *subsystem name*. The resulting sqlstate was *sqlstate value* (sqlcode = *sqlcode value*).

User response

Ensure that MQListener configuration is correctly specified and that a stored procedure of the specified schema and name exists with a correct signature and is accessible to the user running MQListener.

Severity

8 (Error)

DSNQ071I **MQListener encountered an unsupported datatype in the signature of the stored procedure *schema name*. *procedure name* in the subsystem *subsystem name*: datatype = *datatype value*.**

Explanation

MQListener encountered an unsupported datatype in the signature of the stored procedure *schema name*. *procedure name* in the subsystem *subsystem name*. The datatype was *datatype value*.

User response

Consult the MQListener documentation and ensure that the stored procedure has the correct datatype.

Severity

8 (Error)

DSNQ072I **MQListener was unable to start a thread running a task specified in the configuration *configuration name* by the input queue *input queue name* and queue manager *queue manager name*. The ECF error code was *error code value*.**

Explanation

MQListener was unable to start a thread running a task that was specified in the configuration *configuration name* by the input queue *input queue name* and queue manager *queue manager name*. The ECF error code was *error code value*.

User response

Ensure that MQListener configuration is correct, especially the -numInstances parameter, and that the MQListener process has sufficient system resources to execute the required number of simultaneous tasks.

Severity

8 (Error)

DSNQ073I **MQListener started a thread running the task specified in the configuration *configuration name* by the input queue *input queue name* and queue manager *queue manager name*.**

Explanation

MQListener started a thread running the task that was specified in the configuration *configuration name* by the input queue *input queue name* and queue manager *queue manager name*.

User response

None. This is the formal notification of a thread start, expected during startup or restart.

Severity

0 (Informational)

DSNQ074I **A thread running the task specified in the configuration**

***configuration name* by the input queue *input queue name* and queue manager *queue manager name* has exited.**

Explanation

A thread running the task specified in the configuration *configuration name* by the input queue *input queue name* and queue manager *queue manager name* has exited.

User response

None. This is the formal notification of a thread exit, expected during shutdown or restart.

Severity

0 (Informational)

DSNQ075I **MQListener encountered a DB2 database error while running the stored procedure *schema name*. *procedure name* in subsystem *subsystem name* during operation *operation name*. The resulting sqlstate was *sqlstate value* (sqlcode = *sqlcode value*).**

Explanation

MQListener encountered a Db2 database error while running the stored procedure *schema name*. *procedure name* in subsystem *subsystem name* during operation *operation name*. The resulting sqlstate was *sqlstate value* (sqlcode = *sqlcode value*).

User response

Consult MQListener documentation and ensure that MQListener is properly installed in the specified subsystem and access to MQListener packages and configuration tables has been granted to the user running MQListener. Ensure that the stored procedure executes correctly.

Severity

8 (Error)

DSNQ080I **MQListener received an unknown message on admin queue *admin queue name* in queue manager *queue manager name*: *message*.**

Explanation

MQListener received an unknown message on admin queue *admin queue name* in queue manager *queue manager name*: *message*.

User response

Ensure that MQSeries is correctly installed and configured, that MQListener is being run with the proper -adminQMgr and -adminQueue parameter values, and that the MQListener "admin" command is also using the proper -adminQMgr and -adminQueue or -adminQueueList parameter values. If used, check that the -adminQueueList specifies the proper queue names. Check that the admin queue is not being used by another application.

Severity

4 (Warning)

DSNQ081I **MQListener received a shutdown message on admin queue *admin queue name*, queue manager *queue manager name*.**

Explanation

MQListener received a shutdown message on admin queue *admin queue name*, queue manager *queue manager name*.

User response

None. This is a formal notification on receiving a shutdown message.

Severity

0 (Informational)

DSNQ082I **MQListener received a restart message on admin queue *admin queue name*, queue manager *queue manager name*.**

Explanation

MQListener received a restart message on admin queue *admin queue name*, queue manager *queue manager name*.

User response

None. This is a formal notification on receiving a restart message.

Severity

0 (Informational)

DSNQ084I **MQListeners associated with configuration *--configuration name --*, DB2 subsystem *--subsystem name--* are shut down.**

Explanation

MQListener writes a message to the z/OS console log when it is shutdown.

User response

Restart the MQListener.

Severity

0 (Informational)

Chapter 13. DSNR messages

Message identifiers that begin with DSNR communicate information about the recovery manager and indicate the progress of Db2 through a restart process.

DSNR001I RESTART INITIATED

Explanation

This message delimits the beginning of the restart process within startup. The phases of restart are about to begin. These phases are necessary to restore the operational environment to that which existed at the time of the previous termination and to perform any recovery actions that may be necessary to return Db2-managed resources to a consistent state.

DSNR002I RESTART COMPLETED

Explanation

This message delimits the completion of the restart process within startup.

DSNR003I RESTART...PRIOR CHECKPOINT RBA=*xxxxxxxxxxxx*

Explanation

The message indicates the first phase of the restart process is in progress and identifies (as 'xxxxxxxxxxxx') the log positioning RBA of the checkpoint from which the restart process will obtain its initial recovery information.

DSNR004I RESTART...UR STATUS COUNTS IN COMMIT=*nnnn*, INDOUBT=*nnnn*, INFLIGHT=*nnnn*, IN ABORT=*nnnn*, POSTPONED ABORT=*nnnn*

Explanation

This message indicates the completion of the first phase of the restart process. The counts indicate the number of units of work whose execution state during a previous Db2 termination was such that (to ensure Db2 resource consistency) some recovery action must be performed during this restart process or (by the user) upon completion of the restart process. The counts of IN COMMIT, INDOUBT, INFLIGHT and IN ABORT may provide an indication of the time required to perform the remaining two phases of restart (forward and backward recovery). The counts of POSTPONED ABORT URs may provide an indication of the time required to perform -RECOVER POSTPONED processing.

The IN COMMIT count specifies the number that had started but not completed phase 2 of the commit process. These must undergo forward recovery to complete the commit process.

The INDOUBT count specifies the number that were interrupted between phase 1 and phase 2 of the commit process. These must undergo forward recovery to ensure resources modified by them are unavailable until their indoubt status is resolved.

The INFLIGHT count specifies the number that neither completed phase 1 of the commit process nor began the process of backing out. These must undergo backward recovery to restore resources modified by them to their previous consistent state.

The IN ABORT count specifies the number that were in the process of backing out. These must undergo backward recovery to restore resources modified by them to their previous consistent state.

The POSTPONED ABORT count specifies the number whose backout was postponed in an earlier restart process and not attended to prior to this restart process. These must undergo backward recovery after completion of restart, via the -RECOVER POSTPONED command, to restore resources modified by them to their previous consistent state.

DSNR005I RESTART...COUNTS AFTER FORWARD RECOVERY IN COMMIT=*nnnn*, INDOUBT=*nnnn*

Explanation

The message indicates the completion of the forward recovery restart phase. The counts indicate the number of units of work whose recovery actions could not be completed during the phase. Typically, those in an IN COMMIT state remain because the recovery actions of some subcomponents have not been completed. Those units of work in an INDOUBT state will remain until connection is made with the subsystem that acts as their commit coordinator.

Operator response

No action is required unless the conditions persist beyond some installation-defined period of time. Recovery action will be initiated when the resource is brought online. Indoubt resolution will be initiated as part of the process of reconnecting the subsystems.

DSNR006I RESTART...COUNTS AFTER BACKWARD RECOVERY

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INFLIGHT=*nnnn*, IN ABORT=*nnnn*, POSTPONED ABORT=*nnnn*

Explanation

The message indicates the completion of the backward recovery restart phase. The counts indicate the number of units of work whose recovery actions could not be completed during the phase.

When INFLIGHT or IN ABORT URs do not complete backout during restart, they are converted to POSTPONED ABORT status, so the INFLIGHT and IN ABORT counts should be zero. The POSTPONED ABORT count indicates the number of URs for which backout work still exists (from this or a previous restart).

Backout work for the POSTPONED ABORT URs should be completed by the user (by using the RECOVER POSTPONED command) after Db2 restart has completed.

Operator response

No action is required unless the condition persists beyond some installation-defined period of time. Recovery action will be initiated when the resource collection is brought online.

Related tasks

Resolving postponed units of recovery (Db2 Administration Guide)

Deferring restart processing (Db2 Administration Guide)

Related reference

-RECOVER POSTPONED (Db2) (Db2 Commands)

DSNR007I RESTART...STATUS TABLE

Explanation

This message precedes a table showing the status of units of recovery (URs) after each restart phase. The message and the table will accompany the DSNR004I, DSNR005I, or DSNR006I message after each nested phase. At the end of the current status rebuild phase, it shows the status of any URs that require processing. At the end of the forward recovery and backoutphases, it shows the status of only those URs which needed processing but were not processed. The table helps to identify the URs that were active when Db2 came down, and to determine the log scope required to bring Db2 up.

The following list describes each column of the table:

T

Connection type. The values could be:

B

Batch: a batch program or QMF user.

I

Internal: a system service being performed on some user's behalf.

S

Subsystem: work that originated from an attached subsystem, either CICS or IMS/VS.

CONID

Connection identifier for related URs. Batch connections are not related to any other connection. Subsystem connections with the same identifier indicate URs that originated from the same subsystem.

CORRID

Correlation identifier; unique within a subsystem connection, it relates a UR to a particular CICS or IMS/VS transaction.

AUTHORIZATION ID

Authorization identifier of the user for whom this UR was created.

PLAN

Name of the plan allocated to the UR.

S

Restart status of the UR. When Db2 came down, the UR was in one of these situations:

A

INABORT: The UR was in the 'must-complete' phase of abort, and is yet to be completed.

C

INCOMMIT: The UR was in the 'must-complete' phase of commit, and is yet to be completed.

D

INDOUBT: The UR had completed the first phase of commit, but Db2 had not received the second phase instruction. The UR must be remembered so it can be resolved when the owning subsystem reattaches.

F

INFLIGHT: The UR had not completed the first phase of commit, and will be backed out.

P

POSTPONED ABORT: The UR has not yet completed backout. Backout must be completed outside of Db2 restart by means of the -RECOVER POSTPONED command.

URID

UR identifier, the log RBA of the beginning of this unit of work. It is the earliest RBA required to process the UR during Restart.

DAY
The day the UR was created, in the format '*ddd*'. It is approximately the time of the first SQL statement of the application or the first SQL statement following a commit point.

TIME
The time the UR was created, in the format '*hh mm ss* '. It is approximately the time of the first SQL statement of the application or the first SQL statement following a commit point.

DSNR009I STORAGE IS NOT AVAILABLE FOR THE UR DISPLAY TABLE, THE SIZE REQUESTED = *xxxx*, STORAGE MANAGER REASON CODE = *yyyyyyyy*

Explanation

There was not enough storage available during the creation of the recoverable UR (RURE) display table (DSNDRUDT).

System action

The system continues to restart but the RESTART... STATUS TABLE is not displayed.

Operator response

Save the console output and inform the system programmer.

System programmer response

Increase the region size of the *ssnm*MSTR address space before restarting Db2 again.

Problem determination

The size requested is approximately 110 bytes for each unit of recovery (UR). See the message DSNR004I to determine the total number of URs to process. Then get the 00E2xxxx reason code from the DSNR009I header. Use these two numbers to determine the reason for the shortage.

DSNR010I AN ERROR OCCURRED IN THE RURE STATUS TABLE SORT/ TRANSLATE MODULE (DSNRUSOR), THE ERROR LOCATION CODE = *xxxx*

Explanation

There was an error in processing the RURE display table. One of these ERROR LOCATION CODES tells what function the module was attempting to perform:

X'0001'
Trace entry to the module

X'0002'
Sort the recoverable UR display table

X'0003'
Translate the recoverable UR table

X'0004'
Convert the store clock value for display

X'0005'
Trace exit from the module

System action

The system continues to restart but the RESTART... STATUS TABLE is not displayed.

Operator response

Save the console output and inform the system programmer.

System programmer response

Use the error code in the message to complete the problem description.

Problem determination

The ERROR CODE tells the problem area and should be used in the problem description. A record was added to the SYS1.LOGREC that contains the PSW and module at the time of the error. This error indicates an application program check of some type.

DSNR011I AN ERROR OCCURRED IN THE RURE STATUS TABLE DISPLAY MODULE (DSNRUDIS), THE ERROR LOCATION CODE = *xxxx*

Explanation

There was an error in processing the RURE display table. One of these ERROR LOCATION CODES tells what function the module was attempting to perform:

X'0001'
Trace entry to the module

X'0002'
Build header for the display table

X'0003'
Build entries for the display table

X'0004'
Call DSNRWTO to display the table

X'0005'
Trace exit from the module

X'0006'
Get message text

System action

The system continues to restart but the RESTART... STATUS TABLE is not displayed.

Operator response

Save the console output and inform the system programmer.

System programmer response

Use the error code in the message to complete the problem description.

Problem determination

The ERROR CODE describes the problem area and should be used in the problem description. A record was added to the SYS1.LOGREC containing the value DSNRUDIS, and the PSW and CSECT at the time of the error. This error indicates an application program check of some type.

Error codes other than X'0006' indicate an application program check of some type. Code X'0006' indicates an error attempting to locate the table text. The trace entry for DSNRUDIS contains the return and reason codes from the Get Text request. That information should be used to complete the problem description.

DSNR014I EXCLUDED RURE TABLE

Explanation

This message contains a list of RUREs which are being bypassed because of the conditional restart. Either they were to be processed in a phase that was bypassed or they were outside the log range.

The following list describes each column of the table:

T
Connection type. The values could be:

B
Batch: a batch program or QMF user.

I
Internal: a system service being performed on some user's behalf.

S
Subsystem: work that originated from an attached subsystem, either CICS or IMS/VS.

CONID
Connection identifier for related URs. Batch connections are not related to any other connection. Subsystem connections with the same identifier indicate URs that originated from the same subsystem.

CORRID
Correlation identifier; unique within a subsystem connection, it relates a UR to a particular CICS or IMS/VS transaction.

AUTHORIZATION ID
Authorization identifier of the user for whom this UR was created.

PLAN
Name of the plan allocated to the UR.

S
Restart status of the UR. When Db2 came down, the UR was in one of these situations:

A
INABORT: The UR was in the 'must-complete' phase of abort, and is yet to be completed.

C
INCOMMIT: The UR was in the 'must-complete' phase of commit, and is yet to be completed.

D
INDOUBT: The UR had completed the first phase of commit, but Db2 had not received the second phase instruction. The UR must be remembered so it can be resolved when the owning subsystem reattaches.

F
INFLIGHT: The UR had not completed the first phase of commit, and will be backed out.

P
POSTPONED ABORT: The UR has not yet completed backout. Backout must be completed outside of Db2 restart by means of the -RECOVER POSTPONED command.

URID
UR identifier, the log RBA of the beginning of this unit of work. It is the earliest RBA required to process the UR during Restart.

DAY
The day the UR was created, in the format '*ddd*'. It is approximately the time of the first SQL statement of the application or the first SQL statement following a commit point.

TIME
The time the UR was created, in the format '*hh mm ss*'. It is approximately the time of the first SQL statement of the application or the first SQL statement following a commit point.

System action

Restart continues.

DSNR015I **THE CHKPTRBA *xxxxxxxxxxxx* SPECIFIED IN THE CRCR IS INVALID**

Explanation

The checkpoint RBA specified in the conditional restart control record (CRCR) is either not available or is not a begin checkpoint record.

System action

Restart is abended with reason code '00D99001'.

Operator response

Inform the system programmer.

System programmer response

By specifying the STARTRBA and/or ENDRBA on the CRESTART control statement, change log inventory (DSNJU003) utility selects an appropriate RBA.

Problem determination

Print the complete checkpoint records queue by using the print log map (DSNJU004) utility. Select a checkpoint RBA from this queue or let the change log inventory (DSNJU003) utility make the selection.

DSNR016I **STARTRBA *xxxxxxxxxxxx* VALIDATION FAILED**

Explanation

A scan from the STARTRBA failed to find a complete log record. Either the entire log was scanned and no complete record was found, or the log manager found an invalid log record. The log manager sends the error messages to the console indicating a bad log record.

System action

Restart abends.

Operator response

Record the log manager message numbers and inform the system programmer.

System programmer response

Use DSN1LOGP to determine a STARTRBA to use for restart. The recovery manager uses the STARTRBA as a starting point for its search of the beginning of a valid log record.

DSNR017I **RESTART IS BEING TERMINATED BECAUSE OF CSRONLY SPECIFICATION IN CRCR**

Explanation

The restart procedure only completed the first phase of startup. The status displayed during this partial restart can be used to build the conditional restart control record (CRCR).

System action

Restart is abended.

System programmer response

To prevent the restart control record from being reused during the next restart attempt, the current restart control record must be canceled. Use the change log inventory (DSNJU003) CRESTART CANCEL option, or create a new restart control record. The newly created restart control record will automatically cancel the previous record.

DSNR018I ***csect-name* RESTART...BACKWARD RECOVERY PROCESSED FROM RBA *fffffffffff* TO RBA *ttttttttttt***

Explanation

This message indicates the range of log processed during the backward phase of RESTART when postponed backout processing has been requested. Processing began with the LR of RBA *fffffffffff* and proceeded backwards to the LR of RBA *ttttttttttt*.

System action

This message is followed by messages DSNR006I and DSNR007I. The former tells how many URs had some backout work postponed. The latter, identifies the postponed abort URs. The amount of log that need to be processed to complete backout processing for the postponed abort URs can be gauged by comparing the RBA reached during RESTART's backward processing (RBA *ttttttttttt*), and the URIDs of the postponed abort URs.

DSNR020I ***csect-name* START MEMBER *member*, OR REPLY 'NO' OR 'QUIESCED'**

Explanation

During a group restart, the group member issuing this message attempted to access the BSDS for member *member*, and either was not able to access the BSDS, or discovered that the BSDS was modified by the change log inventory (DSNJU003) utility since that member was last started. In either case, this Db2 is not able to perform peer restart for member *member*.

For group restart to continue, the identified member must be started.

If it is not possible to start the other member and you want to terminate this group restart, you can reply 'NO' to this message. Replying 'NO' to this message causes this Db2 to terminate with a reason code of 00D900E1. You then have to reply 'NO' to this message for all remaining members participating in this group restart.

If you are sure that the identified member was quiesced the last time it was started, that is, it was stopped with a -STOP DB2 MODE(QUIESCE) command and it stopped with no indoubt units of recovery and no distributed resynchronization responsibility, then you can reply 'QUIESCED' to this message. Replying 'QUIESCED' to this message causes message DSNR030I to be issued as a reminder that group restart will continue **without using the log** from the identified member.

System action

This group member waits for the identified member to be started or for a valid reply to this message.

- If the identified member is started, group restart continues.
- If the reply is 'NO', this Db2 terminates with a reason code of 00D900E1.
- If the reply is 'QUIESCED', group restart continues **without using the log** from the identified member.

DSNR021I ***csect-name*** **DB2 SUBSYSTEM MUST PERFORM GROUP RESTART FOR PEER MEMBERS**

Explanation

This Db2 subsystem must perform the group restart phase to recover either the shared communications area (SCA) or the retained locks for nonstarting members in the data sharing group.

This message marks the beginning of group restart processing for peer members. Messages DSNR023I and DSNR024I or messages DSNR025I and DSNR026I are issued for each peer that is processed by this Db2 subsystem. Message DSNR022I marks the end of group restart processing for peer members.

This message is issued before this Db2 member enters the group restart process. The group restart process is synchronized among all group members that are starting and therefore participating in this group restart. After this Db2 member synchronizes with other members, it is possible that no peer processing will be necessary; in that case message DSNR022I immediately follows this message.

If it is necessary to recover both the SCA and retained locks, this message is issued twice; once for SCA recovery and again for the recovery of the retained locks.

System action

The subsystem begins group restart processing.

DSNR022I ***csect-name*** **DB2 SUBSYSTEM HAS COMPLETED GROUP RESTART FOR PEER MEMBERS**

Explanation

This Db2 subsystem, which previously issued message DSNR021I, completed the group restart phase to recover the shared communications area (SCA) or retained locks for nonstarting Db2 members in the data sharing group.

System action

The subsystem continues with the next restart phase of its own subsystem.

DSNR023I ***csect-name*** **GROUP RESTART INITIATED TO RECOVER THE SCA FOR GROUP MEMBER** ***membname***

Explanation

The Db2 subsystem that issued this message is performing the group restart phase to recover the shared communications area (SCA) for nonstarting member *membname* of the data sharing group.

This message is followed by message DSNR024I after the group restart phase to recover the SCA for the identified member is complete.

System action

The subsystem continues the group restart process.

DSNR024I ***csect-name*** **GROUP RESTART COMPLETED TO RECOVER THE SCA FOR GROUP MEMBER** ***membname***

Explanation

The Db2 subsystem that issued this message completed the group restart phase to recover the shared communications area (SCA) for member *membname* of the data sharing group.

This message is issued only if messages DSNR021I and DSNR023I were issued.

System action

The subsystem continues the group restart process.

DSNR025I ***csect-name*** **GROUP RESTART INITIATED TO RECOVER RETAINED LOCKS FOR GROUP MEMBER** ***membname***

Explanation

The Db2 subsystem that issued this message is performing the group restart phase to recover the retained locks for nonstarting member *membname* of the data sharing group.

This message is followed by message DSNR026I after the group restart phase to recover the retained locks for the identified member is complete.

System action

The subsystem continues the group restart process.

User response

Restart the failed member to release the retained locks.

DSNR026I ***csect-name*** **GROUP RESTART COMPLETED TO RECOVER RETAINED LOCKS FOR GROUP MEMBER** ***membname***

Explanation

The Db2 subsystem that issued this message completed the group restart phase to recover the retained locks for member *membname* of the data sharing group.

This message is issued only if messages DSNR021I and DSNR025I were issued.

System action

The subsystem continues the group restart process.

DSNR030I ***csect-name*** **WILL CONTINUE WITHOUT THE** ***member*** **MEMBER'S LOG, REPLY 'YES' OR 'NO'**

Explanation

The reply to message DSNR020I was 'QUIESCED'. This message is issued as a reminder that group restart will continue **without using the log** from the identified member.

If you are sure that the identified member was quiesced the last time it was started, that is, it was stopped with a -STOP DB2 MODE(QUIESCE) command and it stopped with no indoubt units of recovery and no distributed resynchronization responsibility, then reply 'YES'; otherwise, reply 'NO'.

System action

This group member waits for a valid reply to this message.

- If the reply is 'YES', group restart continues **without using the log** from the identified member.
- If the reply is 'NO', message DSNR020I is reissued to allow you to enter a different response.

DSNR031I ***csect-name*** **PROCESSING LOG RECORD AT RBA** ***rba1*** **TO RBA** ***rba2***

Explanation

This message is produced periodically during the forward and backward processing phases of restart. The RBA values in this message can be used to monitor the progress of the phases of restart.

Forward processing occurs between messages DSNR004I and DSNR005I. During forward processing, the log is read in a forward direction.

Backward processing occurs between messages DSNR005I and DSNR006I. During backward processing, the log is read in a backward direction and reading stops at the RBA that matches the URID of the oldest inflight or in-abort UR.

csect-name
The name of the control section that issued the message.

rba1
The RBA of the log record that is currently being processed.

rba2
The RBA of the last log record that is read in this phase of restart.

If *rba1* is not progressing, restart might be suspended. Messages DSNR055I through DSN058I might accompany this message and provide additional diagnostic information to help identify the cause of the suspension.

System action

Db2 restart continues.

Operator response

If *rba1* is not progressing, notify the system programmer.

System programmer response

If *rba1* is not progressing, take one of the following actions:

- If messages DSNR055I through DSNR058I indicate the reason for the suspension, follow the instructions for those messages to resolve the restart suspension.
- If messages DSNR055I through DSNR058I are not displayed or do not provide enough information, request SVC dumps of the Db2 and IRLM address spaces for problem determination. For data sharing, request dumps from all members of the data sharing group.

User response

No action is required.

Related tasks

Requesting Db2 SVC dumps (Collecting data)

Related information

DSNR004I
RESTART...UR STATUS COUNTS IN COMMIT=*nnnn*, INDOUBT=*nnnn*, INFLIGHT=*nnnn*, IN ABORT=*nnnn*, POSTPONED ABORT=*nnnn*

DSNR005I
RESTART...COUNTS AFTER FORWARD RECOVERY IN COMMIT=*nnnn*, INDOUBT=*nnnn*

DSNR006I
RESTART...COUNTS AFTER BACKWARD RECOVERY INFLIGHT=*nnnn*, IN ABORT=*nnnn*, POSTPONED ABORT=*nnnn*

DSNR055I
csect-name RESTART SUSPENDED SINCE *time* IN *module offset maint-lvl*

DSNR056I
csect-name RESTART SUSPENDED ON IRLM REQUEST. ONE HOLDER OF RESOURCE IS *ss-name*. SERVICE INFO: IRLM FUNC *func-cd*, RESOURCE *res-name*.

DSNR057I
csect-name RESOURCE INFORMATION: DBID X'*dbid*', PSID X'*psid*', PART X'*part#*'

DSNR058I
csect-name ACCESSING ARCHIVE LOG *data-set-name*

DSNR034E ***csect-name*** **THERE CANNOT BE MORE THAN TWO RELEASE LEVELS OF DB2 RUNNING IN THE GROUP**

Explanation

You attempted to start a Db2 that was at a release level that cannot coexist in the data sharing group. There are already two different releases of Db2 currently running in the data sharing group.

System action

Db2 terminates.

System programmer response

If you are sure that the startup procedure is pointing to the correct set of load libraries, you must stop any Db2 subsystems that cannot coexist with the one you are attempting to start.

Related concepts

Release coexistence in Db2 data sharing (Db2 Installation and Migration)

Recommendation for group restart in coexistence (Db2 Installation and Migration)

Related tasks

Migrating an existing data sharing group to Db2 11 conversion mode (Db2 Installation and Migration)

Preparing for Db2 11 migration in Db2 data sharing (Db2 Installation and Migration)

DSNR035I ***csect-name*** **WARNING - UNCOMMITTED UR AFTER** ***number*** **CHECKPOINTS - CORRELATION NAME =** ***correlation-name*** **CONNECTION ID =** ***connection-id*** **LUWID =** ***logical-unit-of-work-id=token*** **PLAN NAME =** ***plan-name*** **AUTHID =** ***authorization-id*** **END USER ID =** ***user-id*** **TRANSACTION NAME =** ***transaction-name*** **WORKSTATION NAME =** ***workstation-name***

Explanation

This message indicates that during checkpoint processing, Db2 encountered an uncommitted unit of recovery (UR) that has an inflight or indoubt status.

csect-name
The name of the control section that issued the message.

number
The cumulative number of checkpoints that were taken since the beginning of the UR.

correlation name
The correlation name for the thread that is associated with the UR.

connection-id
The connection ID for the thread that is associated with the UR.

logical-unit-of-work-id
The logical unit of work ID for the thread that is associated with the UR. An asterisk (*) denotes that the thread originated at the local site.

This value consists of a fully qualified LU network name followed by a period and an LUW instance number. The LU network name consists of a one- to eight-character network ID, a period, and a one- to eight-character network LU name. The LUW instance number consists of 12 hexadecimal characters that uniquely identify the unit of work.

token
A unique token number that is associated with the logical unit of work ID.

If the UR is inflight, *token* refers to the thread in the report from the DISPLAY THREAD command with the TYPE(ACTIVE) option.

If the UR is indoubt, *token* might not refer to the thread in the report from the DISPLAY THREAD command with the TYPE(INDOUBT) option. However, in this case, you can use the logical unit of work ID to determine the correct association.

plan-name
The plan for the thread that is associated with the UR.

authorization-id
The authorization ID for the thread that is associated with the UR.

user-id
The user ID that is associated with the UR, if the thread was created with client user information. Otherwise, an asterisk (*).

transaction-name
The transaction that is associated with the UR, if the thread was created with client user information. Otherwise, an asterisk (*).

workstation-name
The workstation host name that is associated with the UR, if the thread was created with client user information. Otherwise, an asterisk (*).

System action

Processing continues. If statistics class 3 is turned on, IFCID 0313 is written.

System programmer response

You can see the UR in the DISPLAY THREAD TYPE(ACTIVE) report or the DISPLAY THREAD TYPE(INDOUBT) report. Depending on which report is relevant, take one of the following actions:

If the UR is in the DISPLAY THREAD TYPE(ACTIVE) report:
Consult with the application programmer to determine whether this UR is problematic.

If the problematic UR is caused by an application program, you can use the CANCEL THREAD command to roll back the UR, if necessary. Input to the command can be the *logical-unit-of-work-id* value or the *token* value. The amount of time required for the backout process depends on the amount of work performed by the UR.

For more information about problems caused by uncommitted URs, see the information about programming for concurrency.

If the UR is in the DISPLAY THREAD TYPE(INDOUBT) report:
The UR is typically resolved automatically in a reasonable amount of time. However, in cases where the UR is not resolved, consider using the RECOVER INDOUBT command to provide a commit or abort decision. Input to the command can be the *logical-unit-of-work-id* value, the *token* value, or any other appropriate value that is provided in the DISPLAY THREAD TYPE(INDOUBT) report. The amount of time required for the backout process depends on the amount of work performed by the UR.

Programmer response

Ensure that the application commits frequently enough, or consult with your Db2 administrator about decreasing the frequency of the check for uncommitted URs. Use the URCHKTH subsystem parameter.

Related tasks

Displaying threads by LUWID (Db2 Administration Guide)

Programming for concurrency (Db2 Performance)

Related reference

UR CHECK FREQ field (URCHKTH subsystem parameter) (Db2 Installation and Migration)

DSNR036I ***csect-name*** **UNRESOLVED UR ENCOUNTERED DURING CHECKPOINT - CORRELATION NAME =** ***correlation-name*** **CONNECTION ID =** ***connection-id*** **LUWID =** ***logical-unit-of-work-id*** **PLAN NAME =** ***plan-name*** **AUTHID =** ***authorization-id***

Explanation

Db2 detected an INDOUBT unit of recovery (UR) during a checkpoint. Either an INDOUBT UR or POSTPONED ABORT UR exists.

csect-name
The name of the control section that issued the message.

correlation name
The correlation name that is associated with the UR.

connection-id
The connection ID that is associated with the UR.

logical-unit-of-work-id
The logical unit of work ID. An asterisk (*) denotes that the thread originated at the local site.

This value consists of a fully qualified LU network name followed by a period and an LUW instance number. The LU network name consists of a one- to eight-character network ID, a period, and a one- to eight-character network LU name. The LUW instance number consists of 12 hexadecimal characters that uniquely identify the unit of work.

plan-name
The plan that is associated with the UR.

authorization-id
The authorization ID that is associated with the UR.

System action

Processing continues. If statistics class 3 is turned on, IFCID 0313 is written.

System programmer response

Consult with the application programmer to determine if this UR is problematic.

Related tasks

Displaying threads by LUWID (Db2 Administration Guide)

Resolving indoubt units of recovery (Db2 Administration Guide)

Related reference

UR CHECK FREQ field (URCHKTH subsystem parameter) (Db2 Installation and Migration)

DSNR037I ***csect-name*** **WARNING - THE TCP/IP DRDA PORT NUMBER IS CHANGED FROM** ***port-1*** **TO** ***port-2***

Explanation

The TCP/IP DRDA port number specified in the Db2 BSDS is different from the value used the last time a member of the Db2 data sharing group started. All members of a Db2 data sharing group must use the same TCP/IP DRDA port number.

csect-name
The name of the control section that issued the message.

port-1
The TCP/IP DRDA port number that was obtained from the coupling facility during Db2 startup. This value is the TCP/IP DRDA port number that was used the last time a member of the data sharing group was started.

port-2
The TCP/IP DRDA port number that was obtained from the Db2 BSDS during Db2 startup.

System action

Db2 accepts the new TCP/IP DRDA port number, and Db2 startup continues.

Operator response

Contact the system programmer.

System programmer response

If the TCP/IP DRDA port number was changed inadvertently, stop Db2 immediately. Use the change log inventory utility (DSNJU003) to correct the PORT value, and restart Db2.

If this message reflects a change that you want to make to the Db2 DRDA port number, no action is required. The DRDA port number stored in the coupling facility is updated, and this new port number will be used when Db2 validates each member's DRDA port number.

DSNR038I ***csect-name*** **WARNING - THE TCP/IP RESYNCHRONIZATION PORT NUMBER IS CHANGED FROM** ***port_1*** **TO** ***port_2***

Explanation

The TCP/IP resynchronization port number obtained from the DDF record of the BSDS is different than the value specified the last time Db2 started.

Changing the TCP/IP resynchronization port number can cause problems during distributed 2-phase commit processing. The remote DRDA partners record Db2 resynchronization port number in their recovery logs. The resynchronization port number is used to reconnect to the appropriate Db2 member when communication failures occur during 2-phase commit processing. If a Db2 member changes its resynchronization port number, the remote DRDA

partners may be unable to resolve indoubt units of work.

port_1
The TCP/IP resynchronization port number that was obtained from the Db2 BSDS during Db2 startup.

port_2
The TCP/IP resynchronization port number that was obtained from the coupling facility during Db2 startup. This is the TCP/IP resynchronization port number that was used the last time this member was started.

System action

Db2 accepts the new TCP/IP resynchronization port number, and Db2 startup continues.

Operator response

Contact the system programmer.

System programmer response

If the Db2 resynchronization port number was changed inadvertently, stop Db2 immediately. Use the change log inventory utility (DSNJU003) to correct the RESPORT value, and restart Db2.

If this message reflects a change that you want to make to the Db2 resynchronization port number, no action is required. The resynchronization port number stored in the coupling facility for this member is updated, and this new port number will be used when Db2 validates the resynchronization port number for other Db2 members.

DSNR039I ***csect-name*** **WARNING - TCP/IP RESYNCHRONIZATION PORT NUMBER** ***port_1*** **IS THE SAME AS MEMBER** ***member_name***

Explanation

The TCP/IP resynchronization port of the starting Db2 is the same as the member indicated by *member_name*.

port_1
The TCP/IP resynchronization port number that was obtained from the Db2 BSDS during Db2 startup.

member_name
The member name of the Db2 data sharing member that used the same resynchronization port number.

System action

The TCP/IP port number specified in the BSDS is accepted, and Db2 startup continues.

Operator response

Contact the system programmer.

System programmer response

Each member of the Db2 data sharing group should have a unique TCP/IP resynchronization port number. Use the change log inventory utility (DSNJU003) to specify a unique RESPORT value for this Db2 member and the Db2 member identified by *member_name*.

DSNR040I ***csect-name*** **TRACKER RESTART ENDLRSN** ***lrsn*** **DOES NOT MATCH ENDLRSN** ***lrsn*** **ASSOCIATED WITH THE DATA SHARING GROUP**

Explanation

In a data sharing environment, a TRKRSITE Db2 will not restart if it detects inconsistencies in the reported values for ENDLRSN. The ENDLRSN specified on the Conditional Restart Control Record does not match the ENDLRSN in the system communications area (SCA) structure for the data sharing group.

System action

Db2 startup terminates.

Operator response

Collect the SYS1.LOGREC and SVC dump, and contact the system programmer.

System programmer response

If the ENDLRSN value for this member is incorrect, take the following actions:

- Restore the BSDS and Logs for his Tracker Db2 from the primary Db2
- Ensure the Conditional Restart Control Record is correct
- Restart Db2

If the ENDLRSN value in the SCA is incorrect, delete the SCA structure and restart all members of the TRKRSITE data sharing group with the same ENDLRSN.

DSNR042I ***csect-name*** **WARNING - UR ROLLBACK HAS BEEN CANCELED AND IS INCOMPLETE FOR CORRELATION NAME =** ***corrid*** **CONNECTION ID =** ***connid*** **AUTHID**

= *authid* PLAN NAME = *plan-name* URID = *urid*

Explanation

Db2 issues this message when rollback for the indicated thread has been canceled by either the CANCEL THREAD NOBACKOUT command or the RECOVER POSTPONED CANCEL command.

System action

Rollback processing for the thread stops and the unit of recovery is logged as canceled and complete.

User response

Examine the console for messages indicating what objects are being marked as REFP,RECP; those objects will need to be recovered.

DSNR043E ***csect-name* DB2 IS STARTING WITH AN UNSUPPORTED CODE LEVEL. CURRENT LEVEL: *current-code-level* VALID LEVEL(S): *valid-code-levels***

Explanation

The Db2 that is starting is not at the proper code level. Some required maintenance, such as a fallback or coexistence SPE, has not been applied. The level information is different for each SPE level and each release. This information is for the use of your IBM service representative.

This message can occur in the following situations:

- The Db2 that is starting has completed a fallback from a later release and does not have the proper fallback SPE applied.
- The Db2 that is starting does not have the proper coexistence SPE to start in a data sharing group, which is at a later release level.
- The Db2 that is starting is not at a release level that supports coexistence with the data sharing group.

System action

Db2 terminates with reason code 00D900FA.

Operator response

Save the console output and inform the system programmer.

System programmer response

Check the Db2 Program Directory and Preventive Service Planning updates (PSP) to determine what SPE you need.

Verify that:

- Coexistence is supported between the releases you are trying to run.
- The Db2 startup procedure points to the correct set of load libraries.
- The correct SPE has been applied.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the Db2 print log map (DSNJU004) utility.
- Unformatted DSN1PRNT output of the DSNDB01.DBD01 page set. Use the method described in Part 5 of *Diagnosis Guide and Reference* to locate the inconsistent DBD in the DSNDB01.DBD01 page set.

DSNR044E ***csect-name* MEMBER *member-name* IS STARTED AT A LEVEL OF CODE *started-code-level* WHICH IS NOT COMPATIBLE WITH THE STARTING MEMBER. VALID LEVEL(S) *valid-code-levels***

Explanation

The code levels are not compatible between the Db2 member that has already started and the Db2 member that is starting. You need to apply the correct SPE to the Db2 member that is at the earlier level.

The level information is different for each SPE level and each release. This information is for the use of your IBM service representative.

This message occurs when a starting Db2 member is at a later release level that cannot coexist with an existing Db2 member.

System action

After detecting the first member with which it cannot coexist, Db2 terminates with reason code 00D900FA.

Operator response

Save the console output and inform the system programmer.

System programmer response

Check the Program Directory and Preventive Service Planning updates (PSP) to ensure that all active members in the group have the proper SPE applied.

Verify that:

- Coexistence is supported between the releases you are trying to run.
- The Db2 startup procedure points to the correct set of load libraries.
- The correct SPE has been applied.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the Db2 print log map (DSNJU004) utility.
- Unformatted DSN1PRNT output of the DSNDB01.DBD01 page set. Use the method described in Part 5 of *Diagnosis Guide and Reference* to locate the inconsistent DBD in the DSNDB01.DBD01 page set.

DSNR045I ***csect-name*** **DB2 SUBSYSTEM IS STARTING AND IT WAS NOT STARTED IN A PREVIOUS RELEASE WITH THE FALLBACK SPE APPLIED. FALLBACK SPE APAR:** ***apar-number*** **NEW RELEASE LEVEL:** ***release*** **KNOWN LEVEL(S):** ***level***

Explanation

Db2 was not started with the FALLBACK SPE active before an attempt was made to start Db2 in a new release. The FALLBACK SPE must be applied, and the system must be started before Db2 can be started in a new release.

release level
The release and level are different for each release, and are for the use of the IBM service representative.

apar-number
The apar-number is the FALLBACK SPE that is missing.

System action

Db2 terminates with reason code 00D96001.

User response

Ensure that the FALLBACK SPE is applied, and Db2 is started before starting Db2 in a new release.

DSNR046I ***csect-name*** **INCOMPLETE UNITS OF RECOVERY EXIST FOR** ***subsys***

Explanation

This message is issued during Db2 shutdown if any incomplete units of recovery exist for the referenced member of a data sharing group. The message indicates that retained locks will be held by subsystem *subsys*.

System action

Db2 shutdown continues normally.

User response

Restart Db2 and resolve the incomplete units of recovery to release the retained locks held by subsystem *subsys*.

DSNR047I ***csect-name*** **POSTPONED ABORT BACKOUT PROCESSING LOG RECORD AT RBA** ***rba1*** **TO RBA** ***rba2***

Explanation

This message is produced periodically during the backout processing of postponed abort units of recovery, initiated by the -RECOVER POSTPONED command. The RBAs in this message can be used to monitor the backout progress.

During the backout process, Db2 reads the log in a backward direction and stops reading the log at the RBA matching the URID of the oldest postponed-abort UR *rba2*. *rba1* is the RBA of the log record currently being processed.

System action

Backout processing continues.

System programmer response

This is an information-only message. If the message continues to be issued and *rba1* remains the same, make sure there are no outstanding archive tape

mounts that may be delaying the log read process. Otherwise, obtain a dump of the Db2 address spaces for problem determination.

The -DISPLAY THREAD TYPE(POSTPONED) command can be issued to display information about the postponed abort units of recovery. It is also possible to stop the backout process with the -RECOVER POSTPONED CANCEL command, but this will leave objects in an inconsistent state.

Related reference

-RECOVER POSTPONED (Db2) (Db2 Commands)

-DISPLAY THREAD (Db2) (Db2 Commands)

DSNR048I ***csect-name*** **UR BACKOUT PROCESSING LOG RECORD AT RBA *rba1* TO RBA *rba2* FOR CORRELATION NAME = *correlation-name* CONNECTION ID = *connection-id* LUWID = *logical-unit-of-work-ID=token* PLAN NAME = *plan-name* AUTHID = *authorization-ID* END USER ID = *user-ID* TRANSACTION NAME = *transaction-name* WORKSTATION NAME = *workstation-name***

Explanation

This message is produced periodically during the backout process of an in-abort unit of recovery. The RBAs in this message can be used to monitor the backout progress. Together, CORRELATION NAME, CONNECTION ID, and LUWID identify a thread associated with the UR. If the LUWID is '*', the thread originated at this site. *token* is a unique token number associated with the LUWID. PLAN NAME and AUTHID further identify the thread associated with the UR. If the thread was created with client user information, the user's USERID, TRANSACTION NAME, and WORKSTATION NAME are displayed. Otherwise, these fields contain an '*'.

During the backout process, Db2 reads the log in a backward direction and stops reading the log at the RBA matching the URID of the in-abort UR *rba2*. *rba1* is the RBA of the log record currently being processed.

System action

Backout processing continues.

System programmer response

This is an information-only message. If the message continues to be issued and *rba1* remains the same, make sure there are no outstanding archive tape mounts that might be delaying the log read process. Otherwise, obtain a dump of the Db2 address spaces for problem determination.

It might be possible to stop the backout process with the NOBACKOUT option of the -CANCEL THREAD command, but this leaves objects in an inconsistent state.

Related concepts

How Db2 rolls back work (Db2 Administration Guide)

Related reference

-CANCEL THREAD (Db2) (Db2 Commands)

DSNR050I ***csect-name*** **DB2 STARTED IN SYSTEM RECOVER PENDING MODE**

Explanation

Db2 has started in System Recover Pending mode in preparation for the RESTORE SYSTEM utility. No database update activity is allowed, and DB2 is in restricted access mode.

System action

Db2 startup continues.

This message is non-scrollable. It remains highlighted on the console until you take the appropriate action.

DSNR051I ***csect-name*** **SYSPITR RESTART ENDLRSN *lrsn* DOES NOT MATCH ENDLRSN *lrsn* ASSOCIATED WITH THE DATA SHARING GROUP**

Explanation

For a System Level Recovery restart, all members of the data sharing group must truncate their logs with the same LRSN value that was specified in the SYSPITR conditional restart parameter.

System action

Db2 startup terminates.

Operator response

Collect the SYS1.LOGREC and SVC dump, and contact the system programmer.

System programmer response

Ensure that the conditional restart control record is correct, and then restart Db2. You can run the Print Log Map utility (DSNJU004) to examine the current conditional restart record.

DSNR052I ***csect-name*** **DB2 MEMBER TO REMAIN ACTIVE IN LIGHT MODE TO RESOLVE INDOUBT UNITS OF RECOVERY**

Explanation

This message is issued at the end of restart when the Db2 member has been restarted with the LIGHT(YES) parameter and there are indoubt units of recovery (URs).

System action

The Db2 member remains up and running in light mode. This Db2 member will only allow connections for the purpose of resolving the indoubt URs. Also, certain commands are allowed. Any attempt to connect to this Db2 to submit new SQL work will be disallowed with reason code 00F300A2.

User response

Ensure that the appropriate commit coordinators are started so that they can resync with the Db2 member to resolve the indoubts. Alternatively the -RECOVER INDOUBT command can be used to manually resolve the indoubts.

DSNR053I ***csect-name*** **ALL INDOUBT UNITS OF RECOVERY HAVE BEEN RESOLVED. LIGHT MODE DB2 NORMAL TERMINATION TO FOLLOW**

Explanation

This message is issued after all indoubt units of recovery are resolved for this Db2 member, which was restarted with the LIGHT(YES) parameter.

csect-name
The name of the control section that issued the message.

System action

Db2 subsystem shutdown is initiated.

User response

No action is required.

Related concepts
Restart light (Db2 Data Sharing Planning and Administration)

DSNR054I **RESTART...BEGIN SCAN FOR CHECKPOINT**

Explanation

Db2 must scan the log backwards to locate the prior checkpoint.

System action

After the prior checkpoint is located on the log, restart continues.

DSNR055I ***csect-name*** **RESTART SUSPENDED SINCE** ***time*** **IN** ***module offset maint-lvl***

Explanation

This message is produced periodically during the recovery phase of a restart if Db2 detects that the restart processor has remained suspended across a two minute interval. This message provides the time that the restart processor has suspended, and, the module, offset, and maintenance level for the suspend request.

System action

Db2 restart continues.

Operator response

Notify the system programmer.

System programmer response

If the message repeats every two minutes and Db2 restart does not appear to be progressing, look for additional messages that could indicate the reason for the restart stall. If no other messages are found, request SVC dumps of the Db2 and IRLM address spaces for problem determination. For data sharing, request dumps from all members of the data sharing group.

DSNR056I ***csect-name*** **RESTART SUSPENDED ON IRLM REQUEST. ONE HOLDER OF RESOURCE IS** ***ss-name*****. SERVICE INFO: IRLM FUNC** ***func-cd*****, RESOURCE** ***res-name*****.**

Explanation

This message is produced periodically during the recovery phase of restart if Db2 detects that the restart processor has remained suspended across a two minute interval on an IRLM request. If Db2 is suspended for an IRLM lock in a data sharing environment, Db2 queries IRLM to determine what Db2 subsystem holds the lock. If successful, *ss-name* contains the Db2 subsystem name. Otherwise, *ss-name* contains a series of eight asterisks ('********').

The function code and resource name for the IRLM request is also provided for serviceability.

System action

Db2 restart continues.

Operator response

Notify the system programmer.

System programmer response

If the message repeats every two minutes and Db2 restart does not appear to be progressing, the Db2 subsystem displayed in the message needs to be recycled to allow this subsystem to restart. If the object identified by the message is recognized then consider issuing a -STOP DATABASE followed by a -START DATABASE command to attempt to free the resource. If the stop and start of the object does not resolve the issue then proceed to recycle the Db2 subsystem identified by the message. Request SVC dumps of the Db2 and IRLM address spaces for problem determination before any STOP/START database command or recycling any of the Db2 subsystems. For data sharing, request dumps from all members of the data sharing group.

DSNR057I ***csect-name*** **RESOURCE INFORMATION: DBID X'*dbid*', PSID X'*psid*', PART X'*part#*'**

Explanation

This message is produced periodically during the recovery phase of restart if Db2 detects that the restart processor has remained suspended across a two minute interval on an IRLM request. If Db2 is suspended for an IRLM lock in a data sharing environment, Db2 queries IRLM to determine what Db2 subsystem holds the lock. This message indicates that the locked resource is a type which is held on a database object. The *dbid* contains the DBID and the *psid* contains the PSID in the case of a table space or ISOBID in the case of an index space. If the object is a partition of a partitioned pageset, then the *part#* contains the partition number, otherwise it is zero.

System action

Db2 restart continues.

Operator response

Notify the system programmer.

System programmer response

If the message repeats every two minutes and Db2 restart does not appear to be progressing, then an agent running on the Db2 subsystem identified in message DSNR056I could be holding on to a lock for an extended period of time, that is associated with the DBID, PSID, PART identified in this message. You might be able to use the database object identification information in this message to identify the specific object which is encountering the problem. One way to check what object is encountering the problem is to query the Db2 catalog to find the database name and pageset name, and then to use the DISPLAY DATABASE CLAIMERS or DISPLAY DATABASE LOCKS commands to identify the agent that is holding the lock. If an agent can be identified, you can cancel the agent to release the lock.

DSNR058I ***csect-name*** **ACCESSING ARCHIVE LOG *data-set-name***

Explanation

This message is produced periodically during the recovery phase of restart if Db2 detects that the restart processor has remained suspended across a two minute interval attempting to access an archive log data set. The *data-set-name* contains the data set name of the archive log that Db2 is accessing.

System action

Db2 restart continues.

Operator response

Notify the system programmer.

System programmer response

Look for and resolve any outstanding archive log tape mounts or HSM recall requests that could be causing Db2 restart to stall. If this does not resolve the problem, request SVC dumps of the Db2 and IRLM address spaces for problem determination.

DSNR059I ***csect-name*** **GROUP INFORMATION IN THE SCA IS NOT CONSISTENT WITH A SYSPITR RESTART**

Explanation

Group information in the shared communication area (SCA) indicates that the current SYSPITR restart is invalid. All active members of the data sharing group must restart with the same SYSPITR conditional restart value.

System action

Db2 startup terminates.

Operator response

Notify the system programmer.

System programmer response

Make sure that all data sharing structures in the coupling facility have been deleted before the first SYSPITR restart, and that all active members have been restarted with the same SYSPITR conditional restart value.

DSNR060I ***csect-name*** **THIS DB2 SUBSYSTEM IS MARKED AS DEACTIVATED AND CANNOT BE STARTED.**

Explanation

An attempt was made to start a Db2 subsystem, but the Db2 subsystem that issued the message cannot be started because its BSDS indicates that it has been deactivated.

csect-name
The name of the control section that issued the message.

System action

An SVC dump is generated for abend 04E with reason code 00D10130. The restart is terminated.

System programmer response

Message DSNR060I usually indicates that a Db2 subsystem which has been deactivated was started mistakenly. If the Db2 subsystem should not have been deactivated, use the change log inventory utility (DSNJU003) to restore the member.

Problem determination

Collect the following diagnostic items:

- The SVC dump
- The syslog and LOGREC entries from the time of the error

Related reference
DSNJU003 (change log inventory) (Db2 Utilities)
Related information
00D10130 (Db2 Codes)

DSNR061I ***csect-name*** **MEMBER ID** ***member-id*** **OF GROUP** ***group-name*** **IS INVALID.** ***request-type*** **REQUEST FAILED.**

Explanation

A request to deactivate or destroy a member of a data sharing group specified an invalid member ID.

csect-name
The name of the control section that issued the message.

member-id
The member ID that was specified.

group-name
The name of the data sharing group.

request-type
The type of request: deactivate or destroy.

System action

The request is ignored and is purged from the BSDS. Processing continues.

System programmer response

No action is required.

DSNR062I ***csect-name*** **MEMBER** ***member-name*** **ID** ***member-id*** **OF GROUP** ***group-name*** **CAN NOT BE** ***requested-action*** **BECAUSE IT IS NOT QUIESCED**

Explanation

A request was made to deactivate or destroy a data sharing group member, but the member is not quiesced. Only a quiesced member can be deactivated or destroyed.

csect-name
The name of the control section that issued the message.

member-name **and** ***member-id***
The name and ID of the member that was specified.

group-name
The name of the data sharing group.

requested-action
The requested action, either DEACTIVATED (for a deactivation request) or DESTROYED (for a destruction request).

System action

The request is ignored. Processing continues.

System programmer response

No action is required.

DSNR063I ***csect-name* MEMBER *member-name* ID *member-id* OF GROUP *group-name* SUCCESSFULLY *requested-action***

Explanation

The request to deactivate or destroy a data sharing group member was successful.

csect-name
The name of the control section that issued the message.

member-name* and *member-id
The name and ID of the member that was specified.

group-name
The name of the data sharing group.

requested-action
The requested action, either DEACTIVATED (for a deactivation request) or DESTROYED (for a destruction request).

System action

Processing continues.

System programmer response

No action is required.

DSNR064I ***csect-name requested-action* OF MEMBER *member-name* ID *member-id* OF GROUP *group-name* FAILED. REASON = *reason-code***

Explanation

A request was made to deactivate or destroy a data sharing group member, but the request was not successful.

csect-name
The name of the control section that issued the message.

requested-action
The requested action: DEACTIVATE or DESTROY.

member-name* and *member-id
The name and ID of the member that was specified.

group-name
The name of the data sharing group.

reason-code
A hexadecimal code that indicates the reason for the failure.

System action

The request is ignored. Processing continues.

System programmer response

Use the information provided for the reason code to resolve the problem, then deactivate or destroy the member.

Problem determination

The syslog and LOGREC from the time of the failure might be necessary for diagnosis.

Related concepts
Db2 reason codes (Db2 Codes)

DSNR066I ***csect-name* WARNING - EOM PROCESSING MIGHT BE STALLED FOR JOBNAME = *job-name*, ASID = *asid*.**

Explanation

End-of-memory (EOM) processing for an address space has been inactive for at least 4 minutes. The EOM processing might be stalled, waiting for one or more allied agents to complete abort processing.

csect-name
The name of the control section that issued the message.

job-name
The name of the stalled job.

asid
The MVS address space identifier (ASID) of the stalled job.

Db2 cannot complete EOM processing for the address space until all allied agents in the address space terminate. However Db2 cannot terminate agents undergoing abort processing until the abort action completes. Db2 waits indefinitely for the abort to complete, to give long-running agents enough time to complete their processing with data integrity.

System action

While an address space is undergoing EOM processing, the recovery termination manager (RTM) checks periodically to determine whether EOM processing for the address space is inactive for more than 4 minutes. When that occurs, RTM abends the Db2 system agent with ABEND30D. Db2 recovery logic retries the abend indefinitely for any must-complete allied agents waiting for abort to complete. More than one address space might be in this condition. Db2 issues message DSNR066I to the console for only one of the address spaces it detects in this state.

The console might show other messages, such as DSNR048I, identifying the Units of Recovery (URs) for this address space which are taking a long time to complete their processing. Other address spaces possibly encountering this condition might also be identified from these messages. Db2 checks all the URs for the address space referenced in the message. It deletes the highlighted message for this address space when it detects that there are no more URs in a pending abort condition for this agent.

System programmer response

Determine whether EOM processing for the address space has been stalled too long, according to your specific system or application criteria. If it has, you might need to terminate Db2. Terminating Db2 cancels the abort processing for the long running agents so that EOM processing for the address space can continue.

When it restarts, Db2 must repeat the canceled abort processing to resolve the long running URs. However, you can postpone the back-out of the long running URs, so that Db2 restart can complete first. For more information, see Deferring restart processing (Db2 Administration Guide).

User response

No action is required.

Related tasks

Resolving postponed units of recovery (Db2 Administration Guide)

Chapter 14. DSNS messages

Message identifiers that begin with DSNS communicate information about the storage manager and indicate the progress of Db2 when storage parameters are being specified.

DSNS001I *csect_name* SUBSYSTEM HAS EXCEEDED THE USER SPECIFIED REAL STORAGE USAGE THRESHOLD

Explanation

You have requested to perform real storage monitoring by specifying a non-zero value for subsystem parameter SPRMRSMX. Db2 has determined that the amount of real storage used has reached or exceeded the amount of combined real and auxiliary storage allowed.

System action

The Db2 subsystem requests to record a Db2 SYS1.LOGREC entry, and an RC00E20033 abend dump is requested before Db2 subsystem termination is initiated. The system terminates with:

```
*DSNV086E = DB2 ABNORMAL TERMINATION
 REASON=00E20033
```

System programmer response

Determine whether the value specified for subsystem parameter, SPRMRSMX is realistic. If you decide to contact IBM support, provide the Db2 SYS1.LOGREC entry and the RC00E20033 dump. Also, you will most likely be asked to provide IFCID225 records, which show historical storage usage, in order to determine what area is responsible for the real frame build up.

DSNS002I *csect-name* THE VALUE SPECIFIED FOR SUBSYSTEM PARAMETER REALSTORAGE_MAX IS EQUAL OR GREATER THAN AVAILABLE REAL STORAGE

Explanation

The value of the REALSTORAGE_MAX subsystem parameter is equal to or greater than the amount of real storage that is available to the address space.

csect-name
The name of the control section that issued the message.

System action

Db2 continues with normal startup.

System programmer response

Increase the specified value if appropriate. The specified value might be normal if you expect that much of the real storage usage for the installation is to be paged out to auxiliary storage devices.

DSNS003I *csect-name*SUBSYSTEM WARNING THRESHOLD FOR REAL STORAGE HAS BEEN DETECTED

Explanation

The system has consumed a critical amount of the real and auxiliary storage that is allotted to this Db2 subsystem by the REALSTORAGE_MAX subsystem parameter.

csect-name
The name of the control section that issued the message.

System action

Processing continues but Db2 enters contraction mode if it is not already enabled. If real storage growth continues and reaches the limit defined by the value of the REALSTORAGE_MAX subsystem parameter, Db2 terminates.

This message is non-scrollable. It remains highlighted on the console until you take the appropriate action.

Operator response

If appropriate, increase the value of the REALSTORAGE_MAX subsystem parameter, and determine why the real storage usage is approaching the maximum allowed. If possible, reduce the workload that is entering this Db2 member until the condition is relieved.

Related reference

Subsystem parameters that are not on installation panels (Db2 Installation and Migration)

Related information

DSNV516I
csect-name - BEGINNING STORAGE CONTRACTION MODE

DSNS004I *csect-name* SUBSYSTEM THRESHOLD FOR REAL STORAGE RELIEVED

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Explanation

The real storage usage has dropped below the warning threshold.

csect-name
The name of the control section that issued the message.

System action

Processing continues.

Operator response

Determine why the shortage occurred and try to prevent that from happening again. Use IFCID 0225 to analyze prior trends. The following trace fields are relevant for this investigation:

- QW0225AX
- QW0225ComStg_Aux
- QW0225ComStg_Real
- QW0225HVAuxSlots
- QW0225HVPagesInReal
- QW0225PriStg_Real
- QW0225PriStg_Aux
- QW0225RL
- QW0225ShrStg_Real
- QW0225ShrStg_Aux

Related reference

Subsystem parameters that are not on installation panels (Db2 Installation and Migration)

Related information

DSNS003I
*csect-name*SUBSYSTEM WARNING THRESHOLD FOR REAL STORAGE HAS BEEN DETECTED

Chapter 15. DSNT messages

Message numbers that begin with DSNT communicate information about the service controller.

Messages issued by DSNTINST, DSNTINS1, and DSNTINS2 installation CLISTs use the following internal severity levels:

0
Successful execution: CLIST progress and tracing messages (processing continues)

4
Warning: some adjustments might be made by the installation CLISTs (processing and JCL editing continues)

8
Error: unable to continue (no JCL is edited)

DSNT000I *program-name* STARTED FOR *subsystem-id* SUBSYSTEM, VERSION *db2-version* (*system-mode*)

Explanation

This informational message is returned at the start of the indicated program and reports information about the Db2 version and the processing mode of the Db2 subsystem that the program has connected to.

program-name
The name of the program.

subsystem-id
The Db2 subsystem identifier.

db2-version
The Db2 version.

system-mode
The current Db2 mode. Possible values are:

CM*n*
Conversion mode, where *n* represents the version of Db2 that is being migrated from.

NFM
New-function mode

System action

Processing continues.

User response

No action is required.

DSNT001I *program-name* INTERNAL ERROR AT LOCATION *location-name* BECAUSE OF UNEXPECTED OBJECT OF TYPE *object-type* WITH NAME *object-name*

Explanation

The program was terminated because an object was not expected.

program-name
The name of the program.

location-name
Diagnostic information that identifies the function that was involved in the error.

object-type
The type of object.

object-name
The name of the object, as either a specific name or a qualified name:

***object-name* is a specific name**

```
SPECIFIC NAME name
```

***object-name* is a qualified name**

```
qualifier.name
```

System action

Processing terminates.

User response

Verify that the latest maintenance has been applied, and apply maintenance if necessary. If the problem persists, contact IBM Support

Severity

12 (severe error)

DSNT002I *program-name* RECEIVED AN UNEXPECTED SQLCODE OF *sql-code* FROM THE *sql-request* REQUEST

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Explanation

During processing of an SQL request, the program received an unexpected SQL code. Further processing has been halted.

program-name
The name of the program.

sql-code
A numeric value that indicates why the SQL statement execution was unsuccessful.

sql-request
All or part of the SQL statement that was issued. For a long statement, only a portion of the statement is provided.

System action

The program rolls back all SQL changes and terminates.

User response

Examine the standard SQLCA diagnostic messages and output in the SYSPRINT output log at the point of failure to determine the cause of the error. Correct the error and rerun the program.

Problem determination

This message is followed by one or more of the standard SQLCA diagnostic messages: DSNT404I, DSNT408I, DSNT411I, DSNT415I, DSNT416I, DSNT417I, and DSNT418I.

Severity

12 (severe error)

Related information

DSNT404I
SQLCODE = *sql-code*, *explanation*

DSNT408I
SQLCODE = -*sql-code*, *explanation*

DSNT411I
SQLCAID = xxxx, SQLCA IDENTIFIER

DSNT415I
SQLERRP = xxxx, SQL PROCEDURE DETECTING ERROR

DSNT416I
SQLERRD = *field-1*, *field-2*, *field-3*, *field-4*, *field-5*, *field-6* SQL DIAGNOSTIC INFORMATION

DSNT417I
SQLWARNn-n SQL WARNINGS

DSNT418I
SQLSTATE = *sqlstate*, SQLSTATE RETURN CODE

DSNT003I DSNT003I DSNTRIN HAS ENCOUNTERED AN ERROR IN THE CONTROL STATEMENT, DD = *dd-name*, ERROR = *error-text*, LINE = *line-number*, STATEMENT = *error-statement*

Explanation

DSNTRIN, the configuration tool for routines supplied by Db2, encountered an error during configuration control statement processing.

error-text
Additional information about the error. Expected values include:

- `CONTROL STATEMENT HAS AN INVALID FORMAT`
- `ROUTINE NAME HAS AN INVALID FORMAT`
- `CONTROL STATEMENT EXCEEDS 720 BYTES`
- `NO VALUE FOUND FOR THE FIRST|SECOND|THIRD PARAMETER OR ONE OR MORE CONTROL STATEMENTS WAS NOT SEPARATED BY A BLANK LINE`
- `ONLY ONE PARAMETER FOUND`
- `ACTUAL PARAMETERS: x, EXPECTED PARAMETERS: y`
- `UNEXPECTED PARAMETER parameter-name FOUND`
- `CONTROL STATEMENT FOR routine-name NOT SUPPORTED`
- `CONTROL STATEMENT FOR routine-name ALREADY PROCESSED`
- `CONTROL STATEMENT FOR routine-name NOT FOUND`

line-number
The location of the error.

dd-name
The name of the data definition statement.

error-statement
The control statement in error.

System action

Processing terminates.

User response

Locate the control statement in error at the indicated line in the input allocated by the data definition indicated by *dd-name*. Analyze the statement for the indicated error. Correct the problem, and resubmit job DSNTIJRT to continue DSNTRIN processing.

Severity

12 (severe error)

Related concepts

Job DSNTIJRT (Db2 Installation and Migration)

DSNT004I DSNTRIN HAS SUCCESSFULLY CREATED *object-type object-name*

Explanation

DSNTRIN has successfully created the SQL object.

object-type
The type of object.

object-name
The name of the object, as either a specific name or a qualified name:

***object-name* is a specific name**

```
SPECIFIC NAME name
```

***object-name* is a qualified name**

```
qualifier.name
```

System action

Processing continues.

User response

No action is required.

DSNT005I DSNTRIN HAS SKIPPED *processing-type* PROCESSING OF *object-type object-name*, REASON: *reason-text*

Explanation

DSNTRIN could not complete SQL processing for the indicated object.

processing-type
The type of SQL processing that was attempted.

object-type
The type of object.

object-name
The name of the object, as either a specific name or a qualified name:

***object-name* is a specific name**

```
SPECIFIC NAME name
```

***object-name* is a qualified name**

```
qualifier.name
```

reason-text
One of the following reasons that the message was issued:

The specified Db2 function level is required.
REQUIRES NEW FUNCTION MODE
Db2 must be in new-function mode.

RUN OPTIONS MAX LENGTH EXCEEDED
DSNTRIN cannot alter the RUN OPTIONS for the SYSTOOLS.JSON_LEN function with XPLINK(ON) because the existing options plus ',XPLINK(ON)' exceed the 254-character maximum length.

System action

Processing continues.

User response

If *reason-code* is 10, run the job again after Db2 enters new-function mode. Otherwise, no action is required.

Related reference

Statements (Db2 SQL)

DSNT006I DSNTRIN HAS GRANTED *access-type* ACCESS ON *object-type object-name* TO AUTHORIZATION IDS *authorization-ids*

Explanation

DSNTRIN has granted access on one or more objects to one or more authorization IDs as indicated in the message.

access-type
The access that was granted.

object-type
The type of object.

object-name
The name of the object.

authorization-ids
The authorization IDs to which access was granted.

System action

Processing continues.

User response

Review the access given to ensure that it is appropriate for each authorization ID that it was granted. If the access is not appropriate, modify the GRANTTO parameter of the configuration control statement for each stored procedure or user-defined function that requires a different access list, and resubmit job DSNTIJRT.

Related concepts

Job DSNTIJRT (Db2 Installation and Migration)

DSNT007I **DSNTRIN HAS DROPPED EXISTING *object-type*, *object-name***

Explanation

The indicated object has been dropped. DSNTRIN drops existing objects only in REINSTALL mode or REINITIALIZE mode.

object-type
The type of object.

object-name
The name of the object, as either a specific name or a qualified name:

***object-name* is a specific name**

```
SPECIFIC NAME name
```

***object-name* is a qualified name**

```
qualifier.name
```

System action

Processing continues.

User response

No action is required.

DSNT008I **DSNTRIN HAS SET THE WLM ENVIRONMENT FOR *routine-type schema.routine-name* TO *environment-name***

Explanation

The Db2-supplied stored procedure or user-defined function indicated by *schema.routine-name* has been altered to use the indicated WLM environment.

routine-type
The type of routine: user-defined function or stored procedure.

object-name
The name of the object, as either a specific name or a qualified name:

***object-name* is a specific name**

```
SPECIFIC NAME name
```

***object-name* is a qualified name**

```
qualifier.name
```

environment-name
The name of the WLM environment.

System action

Processing continues.

User response

Review the WLM environment setting for the routine to ensure that it is appropriate. If the environment is not appropriate for the routine, modify the WLMENV parameter of the configuration control statement for each stored procedure or user-defined function that requires to be run in a different WLM environment, and resubmit job DSNTIJRT.

Related concepts
Job DSNTIJRT (Db2 Installation and Migration)

DSNT009I **DSNTRIN BIND PACKAGE REQUEST SUCCEEDED WITH RETURN CODE *return-code* FOR COLLECTION ID *collection-id.package-id***

Explanation

A bind request for the indicated package was completed.

return-code
The return code issued by the command.

collection-id.package-id
The package that was bound.

Other messages related to the bind request might precede this message.

Multiple forms: This message has two forms. The short form is shown above. The long form is:

```
DSNTRIN BIND PACKAGE REQUEST SUCCEEDED
WITH RETURN CODE return-code FOR
COLLECTION ID collection-id.package-id
WITH OWNER owner-id
```

The long form of this message is issued if the OWNER option was specified for the bind request.

owner-id
The package owner.

System action

Processing continues.

User response

No action is required.

Related reference
BIND PACKAGE (DSN) (Db2 Commands)

DSNT010I ***program-name request-type* REQUEST FOR *collection-id.package-id* FAILED WITH RETURN CODE *return-code***

Explanation

The operation requested for the indicated package was rejected by Db2. Diagnostic messages from Db2 precede this message.

program-name
The name of the program.

request-type
The type of request: BIND PACKAGE, BIND PLAN, FREE PACKAGE, or FREE PLAN.

collection-id.package-id
The package that could not be bound or freed.

return-code
A numeric value that indicates the reason for the failure.

System action

The request fails and processing terminates.

User response

Review the diagnostic messages from Db2, correct the problem, and rerun the specified program.

Severity

12 (severe error)

Related information

About Db2 and related commands (Db2 Commands)

DSNT011I ***program-name* INPUT PARAMETERS ARE INVALID, REASON CODE = *reason-code*, TEXT = *reason-text***

Explanation

The program encountered an error when it attempted to process the input parameters that were passed to it in the PARM parameter or the SYSIN DD.

program-name
The name of the program.

reason-code* and *reason-text
The reason code (*reason-code*) describes the cause of the error, and the reason text (*reason-text*) provides additional information that is specific to the reason code.

***reason-code* = 1**
The number of parameters specified is incorrect. The *reason-text* provides the following additional information: *number-passed* PARAMETERS WERE PASSED BUT *number-expected* PARAMETERS ARE EXPECTED, where:

number-passed
The number of parameters that were passed to the program.

number-expected
The number of parameters that were expected by the program.

***reason-code* = 2**
A required parameter was not passed. The *reason-text* provides the following additional information: REQUIRED PARAMETER *parameter-name* WAS NOT PASSED, where:

parameter-name
The name of the parameter that was expected, but that was not provided.

***reason-code* = 3**
An unrecognized parameter was passed. The *reason-text* provides the following additional information: UNRECOGNIZED PARAMETER *parameter-name* WAS PASSED, where:

parameter-name
The name of the parameter that was provided where it was not expected.

***reason-code* = 4**
The value of one of the parameters is not valid. The *reason-text* provides the following additional information: THE VALUE FOR PARAMETER *parameter-name* IS NOT VALID, where:

parameter-name
The name of the parameter that is invalid where it was provided.

***reason-code* = 5**
The routine specified in DD:SYSIN is not a valid Db2-supplied routine. The *reason-text* provides the following additional information: *schema.routine-name* IS NOT A VALID DB2-SUPPLIED ROUTINE, where:

schema.routine-name
The name of the routine, qualified by the name of the schema in which the routine was created.

6
A parameter was specified two or more times. The *reason-text* provides the following additional information: PARAMETER *parameter-name* WAS PASSED MORE THAN ONCE.

7
The statement exceeded the maximum bytes allowed. The reason-text provides the following additional information: STATEMENT EXCEEDS *number-of-bytes* BYTES

System action

Processing terminates.

User response

Correct the problem and run the program again.

Severity

12 (severe error)

DSNT012I ***program-name rrsaf-function* REQUEST FAILED. DSNRLI RETURN CODE = *dsnrli-return*, RRSAF RETURN CODE = *rrsaf-return*, RRSAF REASON CODE = *rrsaf-reason***

Explanation

The program encountered an error when it attempted to establish a connection to the Db2 subsystem.

program-name
The name of the program.

rrsaf-function
The Db2 Recoverable Resource Services Attachment Facility (RRSAF) function that was called.

dsnrli-return
A numeric value that indicates the reason for the failure.

rrsaf-return
The return code issued by Db2 Resource Recovery Services attachment facility (RRSAF).

rrsaf-reason
The reason code issued by the Db2 Resource Recovery Services attachment facility (RRSAF). For more information, see RRSAF return codes and reason codes (Db2 Application programming and SQL)

System action

The program terminates.

User response

Use the return codes provided for DSNRLI and RRSAF to determine the problem, and proceed as instructed.

Severity

12 (severe error)

Related concepts

RRSAF return codes and reason codes (Db2 Application programming and SQL)

Db2 reason codes (Db2 Codes)

DSNT013I **DSNTRIN FOR DB2 VERSION *program-version* CANNOT BE RUN ON DB2 VERSION *db2-version***

Explanation

The code level of program DSNTRIN does not match the Db2 code level. For example, during migration to a new version of Db2, the program was executed on a downlevel member in data sharing coexistence mode.

program-version
The version of the program.

db2-version
The Db2 version.

System action

Processing terminates.

User response

In Db2 data sharing coexistence mode, run the program on a member that has been migrated to the new version. Otherwise, verify that the load library specified in the JOBLIB or STEPLIB for executing the program has the same code level as Db2.

Severity

12 (severe error)

DSNT014I ***program-name file-operation* FILE ERROR FOR DD:*dd-name*. DIAGNOSTIC TEXT *diagnostic-text***

Explanation

The program encountered an error for the data set allocated to the data definition statement.

program-name
The name of the program.

file-operation
The file operation during which the error occurred: OPEN, READ, WRITE, or CLOSE.

dd-name
The name of the data definition statement.

diagnostic-text
Additional diagnostic information for the error.

System action

The file operation fails and the program terminates.

User response

Correct the error indicated by the diagnostics, which are provided by the IBM Language Environment.

Severity

12 (severe error)

Related reference

Language Environment Run-Time Messages (z/OS Language Environment Run-Time Messages)

DSNT015I DSNTRIN PREVIEW OPTION WAS SPECIFIED, THE *install-type* ACTION WAS NOT PERFORMED, INSTALL JCL WAS GENERATED AND STORED IN *stored-location*

Explanation

The Db2-supplied routines and supporting objects were not installed, configured, or bound on the system because the preview option was specified. If a DD statement called JCLOUT was specified in the JCL, then a JCL containing the actual SQL and BIND statements that will be used to install the Db2-supplied routines is generated. A detailed report is also written to SYSPRINT to which objects were included for processing.

Multiple forms: This message has multiple forms. In addition to the standard form shown above, you might see the following form if no JCL job was generated:

```
DSNTRIN PREVIEW OPTION WAS SPECIFIED, THE
install-type ACTION WAS NOT PERFORMED
```

install-type
The type of installation performed.

stored-location
The name of the data set and member where the generated installation job was stored.

System action

The Db2-supplied routines and supporting objects were not installed, configured, or bound. A report describing impact to affected objects is written to SYSPRINT. Optionally, if the job included the JCLOUT DD statement, a JCL containing the actual SQL and BIND statements that can be used to install the Db2-supplied routines is generated.

User response

Review the report and verify which Db2-supplied routines and supporting objects are expected to be created then resubmit the DSNTIJRT installation job without the preview option or submit the generated JCL if you are ready to install the Db2-supplied routines and supporting objects.

Related concepts

Job DSNTIJRT (Db2 Installation and Migration)

Related tasks

Installing Db2-supplied routines during installation (Db2 Installation and Migration)

Installing Db2-supplied routines during migration (Db2 Installation and Migration)

DSNT016I DSNTXAZP THE CLIST INPUT MEMBER *ds-name*(*member*) WAS SUCCESSFULLY CREATED

Explanation

DSNTXAZP has successfully created and stored the CLIST defaults input member.

***ds-name*(*member*)**
The name of the data set and member.

System action

The CLIST defaults input member is generated and a report is written to SYSPRINT.

Processing continues.

User response

No action is required.

DSNT017I DSNTXAZP AN ERROR WAS ENCOUNTERED DURING PROCESSING, ERROR = *error-text*

Explanation

The program encountered an error during processing.

error-text
Additional information about the error. Expected values include:

- THE DB2 VERSION AND THE VERSION OF THE CLIST INPUT MEMBER ARE NOT THE SAME
- THE DB2 VERSION AND THE VERSION OF DSNTXAZP ARE NOT THE SAME
- FAILED TO CONNECT TO DB2
- DSNWLI CALL FAILED, IFCARC1=*ifcarc1*, IFCARC2=*ifcarc2*, IFCABNM=*ifcabnm*, IFCAGRSN=*ifcagrsn*, IFCAGBNM=*ifcagbnm*
- RETRIEVE FILE INFO FAILED (*diagnostic-text*)
- INVALID ACTION '*action*' WAS SPECIFIED

- UNEXPECTED NUMBER OF PARAMETERS FOUND (ACTUAL=*number-found*, EXPECTED=*number-expected*)
- MAXIMUM LENGTH FOR ACTION IS *max-length*
- MAXIMUM LENGTH FOR SSID IS *max-length*
- INSUFFICIENT MEMORY AVAILABLE
- THE INPUT AND OUTPUT DATA SET MEMBER ARE THE SAME
- VERSION *version* IS NOT SUPPORTED

Tokens used within the *error-text* value include:

action
The action that was specified.

diagnostic-text
Diagnostic information for the failure.

number-found
The number of parameters provided.

number-expected
The number of parameters expected.

max-length
The maximum length permitted for the indicated object.

ifcagbnm
A numeric value that indicates the number of bytes that could not fit in the return area.

ifcabnm
A numeric value that indicates the number of bytes that could not fit in the return area.

ifcagrsn
A numeric value that indicates the reason for the failure.

ifcarc1* and *ifcarc2
Numeric values that indicate the reason for the failure.

version
The version that was specified.

System action

The program terminates and the CLIST input member is not created.

User response

Use the information provided in the message to identify and resolve the problem.

Severity

12 (severe error)

DSNT018I DSNTRVFY - A WARNING WAS ENCOUNTERED DURING CALL TO ROUTINE, WARNING = *warning-text*

Explanation

The call to routine encountered a warning during processing.

Multiple forms: This message has multiple forms. In addition to the standard form shown above, you might see the following form if no warning message is available:

```
A WARNING WAS ENCOUNTERED DURING CALL TO ROUTINE
```

warning-text
Information about the warning.

System action

The routine is validated.

User response

ook for additional messages that might explain the cause of the warning or check the manuals for additional information on the routine and proceed as instructed by the message or documentation.

Severity

4 (warning)

Related concepts
Routines (Introduction to Db2 for z/OS)

DSNT019I DSNTRVFY - THE *item* FOUND IS *'value-1'*, EXPECTED IS *'value-2'*

Explanation

The current value for an item does not match the expected value.

item
The item where the discrepancy exists.

'value-1'
The value that was found.

'value-2'
The value that was expected

System action

Processing continues.

User response

Determine what the expected value of the item is.

Verify that the installation job DSNTIJRT ran with the correct mode of installation.

Severity

8 (error)

DSNT020I ***program-name*** **THE CURRENTLY INSTALLED SERVICE DEFINITION DOES NOT MATCH THE BASEID OF THE EXTRACTED WLM SERVICE DEFINITION**

Explanation

The installed WLM service definition does not match the last extracted WLM service definition. This condition happens if the WLM service definition was updated after the WLM service definition was extracted.

program-name
The name of the program.

System action

The WLM service definition is not installed.

User response

Resubmit the request.

Severity

8 (error)

DSNT021I ***program-name*** **WLM SERVICE POLICY** ***policy-name*** **NOT FOUND**

Explanation

The WLM service policy that was supposed to be activated was not found.

program-name
The name of the program.

policy-name
The name of the service policy.

System action

The WLM service policy is not activated.

User response

If you want to activate a WLM service policy, specify a name that is already defined to WLM.

Severity

8 (error)

DSNT022I ***program-name*** **WLM APPLICATION ENVIRONMENT** ***wlm-environment*** **IS ALREADY DEFINED**

Explanation

The WLM application environment that was supposed to be added is defined to WLM.

program-name
The name of the program.

wlm-environment
The name of the existing WLM environment.

System action

The WLM application environment is not added.

User response

If you want to add a new WLM application environment, use a name that is not yet defined to WLM.

Severity

4 (warning)

DSNT023I ***program-name requested-action*** **SUCCESSFUL**

Explanation

The action performed by the program was successful.

program-name
The name of the program.

requested-action
The action that was successful:

- ACTIVATE WLM POLICY *policy-name*, where *policy-name* is the WLM policy.
- ADD WLM APPLICATION ENVIRONMENT *environment-name*, where *environment-name* is the WLM environment name.
- REMOVE WLM APPLICATION ENVIRONMENT *environment-name*, where *environment-name* is the WLM environment name.
- DISPLAY WLM INFORMATION
- QUERY SERVICE POLICY

System action

The action is processed.

User response

No action is required.

DSNT024I ***program-name requested-action*** **FAILED**

Explanation

The action performed by the program failed.

program-name
The name of the program.

requested-action
The action that failed:

- ACTIVATE WLM POLICY *policy-name*, where *policy-name* is the WLM policy.
- ADD WLM APPLICATION ENVIRONMENT *environment-name*, where *environment-name* is the WLM environment name.
- REMOVE WLM APPLICATION ENVIRONMENT *environment-name*, where *environment-name* is the WLM environment name.
- DISPLAY WLM INFORMATION
- QUERY SERVICE POLICY

Multiple forms: This message has two forms. The short form is shown above. The long form is:

program-name requested-action FAILED - PROGRAM IS NOT APF-AUTHORIZED

The long form is used when the reason for the failure is APF authorization.

System action

The action is not processed.

User response

Look for additional messages that might explain the cause of the failure and proceed as instructed by the messages.

If the message includes the text PROGRAM IS NOT APF-AUTHORIZED, make sure that the program resides in an APF-authorized library and that all libraries in the STEPLIB or JOBLIB concatenation for the job that invokes the program are APF-authorized.

Severity

8 (error)

DSNT025I *program-name* WAS UNABLE TO PROCESS THE BIND OR FREE REQUEST, REASON CODE = *reason-code*

Explanation

The program was not able to bind or free the package or plan.

program-name
The name of the program.

reason-code
The reason for the message or SQL code, indicated by one of the following values:

1
The data definition statement was missing.

2
The OPEN request failed.

3
The READ request failed.

4
The request to retrieve file information failed.

5
The call to the bind interface failed.

771
A GETMAIN request was not successful.

772
Unable to set up the bind interface.

773
Unable to remove the bind interface.

Multiple forms: This message has two forms. The short form is shown above. The long form is:

program-name WAS UNABLE TO PROCESS THE BIND OR FREE REQUEST, REASON CODE = *reason-code*,DDNAME = *dd-name*,ERROR = *error text*

The long form is used during I/O operations (file opening or closing).

dd-name
The name of the data definition statement.

error text
Description of error, generated during I/O operation. This text is sometimes a Language Environment error message.

System action

The request fails and the program terminates.

User response

Correct the error based on the information provided for the *reason-code* value:

1
Verify that the job used to execute the program has allocated the SYSTSPRT data definition as SYSOUT=* and the SYSUT1 as a workfile with these attributes:

```
//SYSUT1 DD UNIT=SYSDA,
//          SPACE=(32000,(30,30)),
//          DCB=(RECFM=VB,LRECL=133)
```

771
Increase region, and resubmit the job.

All other values
Respond according to the information received in *error text*. The source of the information is:

2, 3, or 4
IBM Language Environment

5, 772, or 773
BIND interface

Severity

12 (severe error)

DSNT026I **DSNTRVFY VALIDATION FOR *schema.routine-name* WAS NOT PERFORMED BECAUSE THE ROUTINE IS NOT ENABLED ON THIS DB2 SUBSYSTEM**

Explanation

The indicated routine is currently defined with the Db2-reserved WLM application environment name of DSNWLM_NOT_ENABLED, which indicates that the routine is not enabled to run on this subsystem. Because the routine is not enabled to run on this subsystem, validation processing is skipped.

schema.routine-name
The name of the routine, qualified by the name of the schema in which the routine was created.

System action

The routine is not validated.

User response

Verify that routine is intended to be disabled on this Db2 subsystem. If it is not, change the WLM application environment to a valid one.

Severity

4 (warning)

DSNT027I **DSNTRVFY VALIDATION FOR *schema.routine-name* SUCCESSFUL**

Explanation

The validation for the indicated routine was successful. All validation steps completed successfully.

schema.routine-name
The name of the routine, qualified by the name of the schema in which the routine was created.

System action

The routine is validated.

User response

No action is required.

DSNT028I **DSNTRVFY - WLM ENVIRONMENT DETAILS NAME *environment-name* PROC *procedure-name* STATE *wlm-state* NUMTCB *wlm-numtcb***

Explanation

This message provides additional WLM information about the validated routine, and normally follows message DSNT027I, DSNT029I, or DSNT031I.

environment-name
The name of the WLM environment.

procedure-name
The name of the WLM catalog procedure.

wlm-state
The state of the WLM environment, such as ACTIVE.

wlm-numtcb
The number of task control blocks, which represents the number of tasks that can run simultaneously in a single WLM address space.

System action

Additional WLM information is displayed.

User response

No action is required.

Related information

DSNT027I
DSNTRVFY VALIDATION FOR *schema.routine-name* SUCCESSFUL

DSNT029I
DSNTRVFY VALIDATION FOR *schema.routine-name* COMPLETED WITH WARNINGS

DSNT031I
DSNTRVFY VALIDATION FOR *schema.routine-name* FAILED

DSNT029I **DSNTRVFY VALIDATION FOR *schema.routine-name* COMPLETED WITH WARNINGS**

Explanation

The validation for the indicated routine completed with one or more warnings. Some validation steps completed successfully, but others did not.

schema.routine-name
The name of the routine, qualified by the name of the schema in which the routine was created.

System action

The routine is validated.

User response

Look for additional messages that might explain the cause of the warnings and proceed as instructed by the messages.

Severity

4 (warning)

DSNT030I DSNTRVFY - THE ROUTINE IS NOT DEFINED TO SYSIBM.SYSROUTINES

Explanation

The routine that is identified by *schema.routine-name* in message DSNT031I was not defined to the SYSIBM.SYSROUTINES catalog table. This message normally follows message DSNT031I.

System action

Processing continues with the next routine.

User response

Determine if the routine identified in message DSNT031I is the intended one. If it is not, correct the error, and resubmit the DSNTIJRT installation job.

Severity

8 (error)

Related information

DSNT031I
DSNTRVFY VALIDATION FOR *schema.routine-name* FAILED

DSNT031I DSNTRVFY VALIDATION FOR *schema.routine-name* FAILED

Explanation

The validation of the routine was not successful.

schema.routine-name
The name of the routine, qualified by the name of the schema in which the routine was created.

System action

The routine is not validated. Processing continues.

User response

Look for additional messages that might explain the cause of the failure and proceed as instructed by the messages.

Severity

8 (error)

DSNT032I DSNTRVFY - THE CALL TO ROUTINE WAS SUCCESSFUL

Explanation

The routine was successfully called.

System action

Processing continues.

User response

No action is required.

DSNT033I *program-name program-type* ENDED, RETURN CODE = *return-code*

Explanation

The specified batch program has completed.

program-name
The type of program executed.

program-type
The type of program.

return-code
The most severe return code encountered at any time during processing.

System action

The n program terminates.

User response

If the return code is 4 or higher, look for other messages that might explain the cause of the warning or failure, and proceed as instructed by the message.

DSNT034I DSNTRVFY - AN ERROR WAS ENCOUNTERED DURING CALL TO ROUTINE, SQLCODE = *sql-code*

Explanation

The call to routine encountered an SQL error during processing.

sql-code
A numeric value that indicates why the SQL statement execution was unsuccessful.

Multiple forms: This message has multiple forms. In addition to the standard form shown above, you might see one of the following forms if no SQL return code is available:

```
AN ERROR WAS ENCOUNTERED DURING CALL TO ROUTINE
AN ERROR WAS ENCOUNTERED DURING CALL TO ROUTINE,
ERROR = error-text
```

error-text
Information about the error.

System action

The routine is not validated. Processing continues.

User response

Use the information provided for the SQL error code to resolve the problem.

Severity

8 (error)

Related concepts

SQL error codes (Db2 Codes)

DSNT035I **DSNTRVFY VALIDATION PROGRAM FAILED TO INITIALIZE, REASON CODE = *reason-code***

Explanation

The validation program failed to complete initialization because of errors.

reason-code
A numeric value that indicates the reason for the failure.

1
There is insufficient memory to run the program.

2
This version of Db2 is not supported by the program.

3
The program was unable to process the SYSIN DD input.

4
An error was encountered during extended console processing.

5
The bind request for DSNTRVFY failed.

6
The program is not APF-authorized.

System action

The routine validation program terminates.

User response

Use the reason code to determine the cause of the error. Look for additional messages in the job output, on the system console, or on the operator console. Correct the problem, and run the program again.

Severity

12 (severe error)

DSNT036I **DSNTRVFY IGNORED ROUTINE *schema.routine-name* IN LINE *line-number* BECAUSE THE ROUTINE ALREADY EXISTS**

Explanation

The routine was already included for validation. The duplicate routine will be ignored.

schema.routine-name
The name of the routine, qualified by the name of the schema in which the routine was created.

line-number
The line where the second instance of *schema.routine-name* was found.

System action

The duplicate routine is not selected and processing continues.

User response

Remove the duplicate name from the SYSIN DD. If you plan to reuse the job, remove the duplicate name from the SYSIN DD before you rerun the job.

Severity

4 (warning)

DSNT037I ***program-name action* WLM SERVICE DEFINITION REQUEST FAILED, MACRO = *macro-name*, RETURN CODE = *return-code*, REASON CODE = *reason-code***

Explanation

An error was encountered during execution of a WLM macro.

program-name
The name of the program.

action* and *macro-name
The action that was attempted and the WLM macro that was used:

action	*macro-name*
ACTIVATE	IWMPACT
EXTRACT	IWMDEXTR
INSTALL	IWMDINST
QUERY	IWMPQRY

return-code
The severity or type of failure.

reason-code
The Db2 reason code value that indicates the reason for the failure. For explanations of reason codes, see Db2 reason codes (Db2 Codes).

Multiple forms: This message has two forms. The short form is shown above. The long form is:

program-name action WLM SERVICE DEFINITION REQUEST FAILED, MACRO = *macro-name*, RETURN CODE = *return-code*, REASON CODE = *reason-code*, VALIDATE RSN = *validate-reason*, VALIDATE OFFSET = *validate-offset*

The long form of the message is issued when *action* is INSTALL.

validate-reason
A hexadecimal reason code that identifies the specific error in the input service definition found during validity checking.

validate-offset
Location in the service definition file where the validation error occurred. This value is the offset from the beginning of the service definition (IWMSERVD) to the section of the input service definition where validity check processing found an error described by the reason code returned in *validate-reason*.

System action

The program terminates.

User response

Use the information provided for the macro identified by *macro-name* to resolve the problem.

Severity

12 (severe error)

Related reference
IWMDEXTR Return and Reason Codes (MVS Programming: Workload Management Services)
IWMDINST Return and Reason Codes (MVS Programming: Workload Management Services)
IWMPACT Return and Reason Codes (MVS Programming: Workload Management Services)
IWMPQRY Return and Reason Codes (MVS Programming: Workload Management Services)

DSNT038I DSNTRVFY - THE WLM ENVIRONMENT *environment-name* IS NOT AVAILABLE

Explanation

The WLM application environment is either not defined or is not available.

environment-name
The name of the WLM environment.

System action

The routine is not validated. Processing continues with the next routine.

User response

Issue the following MVS system command to determine if the WLM application environment is defined:

```
D WLM,APPLENV=environment-name
```

If the environment is not defined, use one of the following methods to define it:

- Use the WLM administrative application, IWMARIN0.
- Modify and submit the sample JCL DSNTIJRW.

If the environment is defined but the status is reported as not available, determine what caused the WLM application environment to become unavailable, correct the problem, and issue the VARY WLM MVS system command to reset the status.

Severity

8 (error)

DSNT039I THE CALL TO THE ROUTINE WAS NOT PERFORMED

Explanation

The routine will not be called as part of validation for one or more of the following reasons:

- Optional system support, such as CICS, IMS, or MQSeries, is required.
- External setup on a remote server or workstation is required.
- A call could introduce or modify data unexpectedly in a production environment.

The message that precedes this one identifies the routine that was skipped.

System action

The routine is not called. Processing continues.

User response

No action is required.

Related information

DSNT027I
DSNTRVFY VALIDATION FOR *schema.routine-name* SUCCESSFUL

DSNT029I
DSNTRVFY VALIDATION FOR *schema.routine-name* COMPLETED WITH WARNINGS

DSNT040I ***time*** **DSNTRVFY ROUTINE VALIDATION SUMMARY STATUS SCHEMA SPECIFIC NAME**

Explanation

This message displays a summary of which Db2 routines completed successfully, which ones completed with warnings, and which ones failed.

time
The time at which the message was issued, in the format *hh.mm.ss*.

The message is formatted with column headings and dividing lines:

```
   STATUS   SCHEMA   SPECIFIC NAME
-- -------- -------- ---------------
```

Each line begins with a character that identifies the result:

/
Success

X
Failure

*****
Warning

System action

Processing continues.

User response

No action is required.

DSNT041I **DSNTRVFY VALIDATION FOR *schema.routine-name* WAS NOT PERFORMED BECAUSE THE CURRENT MODE IS NOT SUPPORTED**

Explanation

The validation for the routine was skipped because the Db2 level that is required by the routine does not match the current mode.

schema.routine-name
The name of the routine, qualified by the name of the schema in which the routine was created.

The required mode is dependent on the stored procedure that is being validated.

System action

The routine is not validated. Processing continues.

User response

Wait until new function is activated, then run the DSNTIJRV validation job again to validate the routine.

Wait until Db2 enters the required mode indicated in the message, then run the DSNTIJRV validation job again to validate the routine.

Severity

4 (warning)

DSNT042I **DSNTRVFY - THE COLLECTION ID USED TO BIND THE PACKAGE DOES NOT MATCH THE COLLECTION ID DEFINED IN SYSIBM.SYSROUTINES**

Explanation

The collection ID that is defined in the SYSIBM.SYSROUTINES catalog table for the routine does not match the collection ID used to bind the package.

System action

Processing continues.

User response

Determine if the collection ID that was used to bind the package is appropriate, and correct it if it is not.

Severity

4 (warning)

DSNT043I **DSNTRVFY - THE WLM APPLICATION ENVIRONMENT IS SHARED WITH ANOTHER ROUTINE THAT HAS A DIFFERENT SECURITY REQUIREMENT**

Explanation

The following Db2-supplied routines requires RACF program control if the BPX.DAEMON facility class is active. If the BPX.DAEMON is active and one of the programs loaded into the WLM address space where these Db2-supplied routines are running is not defined to program control then an error will be returned by the routine indicating that the operation is not permitted.

- SYSPROC.ADMIN_COMMAND_UNIX
- SYSPROC.ADMIN_JOB_CANCEL
- SYSPROC.ADMIN_JOB_FETCH
- SYSPROC.ADMIN_JOB_QUERY
- SYSPROC.ADMIN_JOB_SUBMIT
- SYSPROC.ADMIN_UTL_MONITOR

System action

Processing continues.

User response

Determine if the BPX.DAEMON is active. If BPX.DAEMON is not active, no action is required.

If it is active, ensure that all programs that have been loaded into the WLM address space where these routines are defined are controlled by RACF. Refer to the DSNTIJRA job, which provides the commands for defining programs to RACF program control.

Severity

4 (warning)

DSNT044I **DSNTRVFY - THIS ROUTINE REQUIRES A WLM ENVIRONMENT NUMTCB SETTING OF 1**

Explanation

The routine requires NUMTCB=1, but the routine was run on a WLM application environment were the NUMTCB is not set to 1.

System action

The routine is not validated. Processing continues.

User response

Verify that the NUMTCB setting of the WLM application environment assigned to the routine is 1. If the NUMTCB setting is not 1, either change the NUMTCB setting to 1 or assign the routine to a WLM application environment where the NUMTCB setting is 1.

Severity

8 (error)

DSNT045I **DSNTRVFY - THE NUMTCB SETTING IS NOT WITHIN THE RECOMMENDED RANGE OF *recommended-range***

Explanation

The routine was assigned to a WLM application environment where the NUMTCB setting is not within the recommended range.

recommended-range
The recommended range for NUMTCB. In the message, this value is expressed in one of the following forms:

minimum* TO *maximum
The recommended range is indicated by specific lower and upper values.

***minimum* OR MORE**
The recommended range is the indicated value or any greater value.

System action

Processing continues.

User response

Verify the NUMTCB setting of the WLM application environment assigned to the routine. If the NUMTCB setting is not within the recommended range, either change the NUMTCB setting to any value within the recommended range or assign the routine to a WLM application environment that has a NUMTCB setting that is within the recommended range.

Severity

4 (warning)

DSNT046I **DSNTRVFY - THE WLM APPLICATION ENVIRONMENT IS NOT APF-AUTHORIZED**

Explanation

The routine requires an APF-authorized environment but the assigned WLM application environment is not APF-authorized.

System action

The routine is not validated. Processing continues.

User response

Determine if the WLM application environment assigned to the routine is APF-authorized. If it is not APF-authorized, either modify the WLM procedure to make it APF-authorized, or assign the routine to a WLM application environment that is APF-authorized.

Severity

8 (error)

DSNT047I **DSNTRVFY - THE WLM APPLICATION ENVIRONMENT IS APF-AUTHORIZED**

Explanation

The routine requires an environment that is not APF-authorized, but the assigned WLM application environment is APF-authorized.

System action

The routine is not validated. Processing continues.

User response

Determine if the WLM application environment assigned to the routine is APF-authorized. If it is APF-authorized, either modify the WLM procedure to make it not APF-authorized, or assign the routine to a WLM application environment that is not APF-authorized.

Severity

8 (error)

DSNT048I **DSNTRVFY - THE DD STATEMENT *dd-name* WAS NOT FOUND**

Explanation

The routine requires that the indicated data definition (DD) statement is defined to the WLM stored procedure address space, but the statement was not allocated.

dd-name
The name of the data definition statement.

If a diagnostic message from the IBM Language Environment service is available, that message follows DSNT048I. This additional message provides specific information about the failure that can be used to help diagnose the cause.

System action

The routine is not validated. Processing continues.

User response

Determine whether the WLM application environment that is assigned to the routine contains the DD statement indicated by *dd-name*. If it does not contain the required DD statement, either modify the WLM procedure to include the DD statement or assign the routine to a WLM application environment that contains the DD statement.

Otherwise, if an additional message from the IBM Language Environment service is provided, use that message to diagnose and correct the problem.

Severity

8 (error)

DSNT049I **DSNTRVFY - JAVA VERSION (*java-version*)**

Explanation

The WLM application environment to which the Java™ routine is assigned is configured correctly for Java, and the indicated version of Java was found.

java-version
The version of Java that is available to the WLM environment.

System action

Processing continues.

User response

No action is required.

DSNT050I **DSNTRVFY - JAVA NOT ENABLED ON WLM ENVIRONMENT *environment-name***

Explanation

The WLM application environment to which the Java routine is assigned is not configured correctly for Java.

environment-name
The name of the WLM environment.

System action

The routine is not validated. Processing continues.

User response

Modify the WLM catalog procedure that starts the WLM stored procedure address space to include the JAVAENV data definition statement.

Severity

8 (error)

Related tasks

Setting up the environment for Java routines (Db2 Application Programming for Java)

DSNT051I ***program-name*** **ACTIVE WLM SERVICE DEFINITION SERVICE DEFINITION NAME** ***definition-name*** **INSTALLED ON** ***timestamp*** **INSTALLED BY** ***user-id*** **INSTALLED FROM** ***system-name*** **NUMBER OF APPLICATION ENVIRONMENT** ***environment-count***

Explanation

This message is returned by the indicated program as a response to a request to display WLM information.

program-name
The name of the program.

definition-name
The name of the WLM service definition.

timestamp
The date and time when the service definition was installed, in the format *yyyy-mm-dd-hh.mm.ss.nnnnnn*.

user-id
The user ID of the service administrator who installed the service definition.

system-name
The name of the system on which the service definition was installed.

environment-count
The number of application environments that are defined.

This message is issued in response to either the batch program DSNTWLMB or the stored procedure DSNTWLMS (SYSPROC.DSN_WLM_APPLENV) when WLMINFO is specified.

System action

Processing continues.

User response

No action is required.

DSNT052I ***program-name*** **THE AUTHID SPECIFIED,** ***authorization-id*****, DOES NOT HAVE INSTALLATION SYSTEM ADMINISTRATOR AUTHORITY**

Explanation

The indicated authorization ID, which was specified in the AUTHID parameter for the indicated program, is not a Db2 installation system administrator ID. In order to be marked as system defined, stored procedures and user-defined functions need to be created or altered using Db2 installation system administrator authority.

program-name
The name of the program.

authorization-id
The specified authorization ID.

System action

Db2-supplied stored procedures and user-defined functions that are created or altered by this routine are not marked as system defined.

User response

If Db2-supplied stored procedures and user-defined functions at your site need to be marked as system defined, change the AUTHID parameter to a Db2 installation system administrator ID and run job DSNTIJRT again.

Severity

4 (warning)

Related concepts

Job DSNTIJRT (Db2 Installation and Migration)

Job DSNTIJRV (Db2 Installation and Migration)

Related reference

Common Db2 administrative authorities (Managing Security)

DSNT053I **DSNTRIN WAS UNABLE TO PROCESS THE IFI READS REQUEST FOR IFCID 106: RETURN CODE = *return-code*, REASON CODE = *reason-code*, BYTES NOT MOVED = *bytes-remaining***

Explanation

DSNTRIN attempted to perform a synchronous read of IFCID trace record 106 but received an unexpected return code from the Db2 Instrumentation Facility Interface (IFI).

return-code
The return code from IFI.

reason-code
The reason code from IFI.

bytes-remaining
The number of bytes that did not fit in the return area and still remain in the buffer.

System action

DSNTRIN terminates.

User response

To diagnose the error, refer to the return and reason codes for information about the IFCARC1 and IFCARC2 values in the instrumentation facility communications area (IFCA). Rerun job DSNTIJRT when the cause has been corrected.

Severity

8 (error)

Related concepts
X'E6.....' codes (Db2 Codes)
Job DSNTIJRT (Db2 Installation and Migration)
Related reference
Instrumentation facility communications area (IFCA) (Db2 Performance)

DSNT054I ***program-name* ONE OR MORE SUPPORTING OBJECTS WERE IDENTIFIED FOR UPDATE, A REBIND MAY BE REQUIRED FOR PACKAGES THAT REFERENCE THESE OBJECTS**

Explanation

The program identified one or more supporting objects for update while in preview mode and the program can not determine whether packages will be invalidated as a result of the update.

program-name
The name of the program.

System action

Processing continues.

User response

If the ABIND subsystem parameter is set to NO and you use the generated JCL to install or update the Db2-supplied routines, then you need to resubmit the DSNTIJRT installation job afterwards with the MODE(INSTALL-PREVIEW) option. That action identifies and generates BIND statements for any packages that were invalidated. Finally, you must process the generated BIND statements.

If the ABIND subsystem parameter is set to YES, or if you run the DSNTIJRT job without the PREVIEW option, then no action is required because Db2 rebinds any invalidated package automatically.

Severity

4 (warning)

Related concepts
Job DSNTIJRT (Db2 Installation and Migration)
Changes that invalidate packages (Db2 Application programming and SQL)
Automatic rebinds (Db2 Application programming and SQL)
Related reference
AUTO BIND field (ABIND subsystem parameter) (Db2 Installation and Migration)

DSNT055I **DSNTRIN HAS BYPASSED THE CONFIGURATION CONTROL STATEMENT FOR OBSOLETE ROUTINE *schema-name.routine-name***

Explanation

Program DSNTRIN encountered a configuration control statement for an obsolete Db2-supplied stored procedure or user-defined function.

schema-name
The name of the table schema or creator.

routine-name
The name of the user-defined function or stored procedure.

System action

The statement is ignored. Processing continues.

User response

Remove the configuration control statement for the obsolete routine.

Severity

4 (warning)

DSNT056I ***program-name*** **AN ALTER REQUEST HAS PLACED TABLE SPACE** ***database-name.tablespace-name*** **IN ADVISORY REORG PENDING STATUS**

Explanation

The table indicated in a preceding message has been changed with an SQL alter statement by the program indicated by *program-name*. The containing table space, *database-name.tablespace-name*, is available but the definition changes have not yet been applied.

program-name
The name of the program.

database-name
The name of the database.

tablespace-name
The name of the table space.

System action

The table space is placed in pending definition status. Processing continues.

User response

Run the REORG TABLESPACE utility with SHRLEVEL CHANGE or SHRLEVEL REFERENCE on the entire table space to materialize the pending definition changes.

DSNT057I **DSNTMVSB PROGRAM ENDED, RETURN CODE =** ***return-code*****, COMMAND COMPLETION CODE =** ***command-completion-code*****.**

Explanation

The batch program DSNTMVSB has completed.

return-code
The return code encountered during processing:

return-code

0

The batch program did not encounter any errors during processing.

command-completion-code is set to 0 or 4.

4

The batch program issued the command but was unable, within the prescribed wait time, to determine the command execution status based on the command messages retrieved. All command messages and any Db2 MSTR / IRLM job status messages retrieved within the prescribed wait time are written to DD:CMDOUT.

command-completion-code is set to 8 or 16.

8

The batch program issued the command but was unable to determine the command execution status due to an internal error. All the command messages and any Db2 MSTR / IRLM job status messages retrieved so far are written to DD:CMDOUT.

command-completion-code is set to 8 or 16.

12

The batch program encountered an error during processing. A message describing the error is written to SYSPRINT.

16

The batch program did not encounter any errors during processing. However, the command completed abnormally.

command-completion-code is set to 12.

command-completion-code

0

The command completed successfully.

Table 2. Details for command-completion-code 0

Command	***command-completion-code*** **meaning**	**Message received**
START DB2	Successful completion	DSN9022I *cmd_prefix*

Table 2. Details for command-completion-code 0 (continued)

Command	*command-completion-code* meaning	Message received
STOP DB2	Successful completion	DSN9022I *cmd_prefix* If Db2 MSTR address space termination monitoring is requested: message '*ssnm*MSTRNOT FOUND' was found in the 'D J, *ssnm*MSTR' command output.

4

The command was not processed. For example, Db2 was already stopped when STOP DB2 was requested.

Table 3. Details for command-completion-code 4

Command	*command-completion-code* meaning	Message received
START DB2	Db2 was already active when the command was issued.	DSNY003I *cmd_prefix*
STOP DB2	When the command was issued, Db2 was already stopped or Db2 was in the process of stopping and it stopped successfully.	If Db2 MSTR or IRLM address space termination monitoring is not requested, any of the following messages are received: • DSN3106I *cmd_prefix* • DSNY004I*cmd_prefix* and DSN9022I *cmd_prefix* If Db2 MSTR address space termination monitoring is requested, both of the following messages were received: • DSNY004I *cmd_prefix* and DSN9022I*cmd_prefix* • '*ssnm*MSTRNOT FOUND' in 'D J, *ssnm*MSTR' command output If IRLM address space termination monitoring is requested, both of the following messages were received: • DSNY004I *cmd_prefix* and DSN9022I*cmd_prefix* • 'irlm_job NOT FOUND' in 'D J, 'irlm_job' command output

8

The command started but the completion status is unknown.

Table 4. Details for command-completion-code 8

Command	*command-completion-code* meaning	Message received	Expected message not received
START DB2	Db2 is in the process of starting, but the completion status of the START DB2 command is unknown.	DSNY024I *cmd_prefix*	Any of the following messages: • DSN9023I *cmd_prefix* • DSNV086E *cmd_prefix* • DSN3104I *cmd_prefix* • DSN9022I *cmd_prefix* • DSN3100I *cmd_prefix*
STOP DB2	Db2 is in the process of stopping, but the completion status of the STOP DB2 command is unknown.	One of the following messages was received: • DSNY002I *cmd_prefix* • DSNY004I *cmd_prefix*	One of the following messages was not received: • DSN9022I *cmd_prefix* • DSN9023I *cmd_prefix* Or DSN9022I *cmd_prefix* was received along with one of the following conditions:

Table 4. Details for command-completion-code 8 (continued)

Command	*command-completion-code* meaning	Message received	Expected message not received
			• Db2 MSTR address space termination monitoring is requested, and '*ssnm*MSTR NOT FOUND' was not found in 'D J, *ssnm*MSTR' command output • IRLM address space termination monitoring is requested, and 'irlm_job NOT FOUND' is not found in 'D J, 'irlm_job' command output.

12

The command completed abnormally.

Table 5. Details for command-completion-code 16

Command	*command-completion-code* meaning	Message received
START DB2	Abnormal completion.	One of the following messages was received: • DSN9023I *cmd_prefix* • DSNV086E *cmd_prefix* • DSN3100I *cmd_prefix* • DSN3104I *cmd_prefix* • DSN3106I *cmd_prefix* • DSN3107I *cmd_prefix*
STOP DB2	Abnormal completion.	One of the following messages was received: • DSN9023I *cmd_prefix* • DSN3107I *cmd_prefix*

16

The command output does not satisfy the conditions that are listed for *command-completion-code* 0, 4, 8, or 12.

command-completion-code
The completion status of the command.

System action

The program terminates.

User response

Use the information provided for the *return-code* and *command-completion-code* to determine the status of command execution.

Related reference
DSNTMVSB tool (Db2 Installation and Migration)
-START DB2 (Db2) (Db2 Commands)
-STOP DB2 (Db2) (Db2 Commands)

DSNT058I DSNTRIN PROCESSING CANNOT BE CONTINUED BECAUSE *routine-type routine-name* IS DEFINED WITH AN UNEXPECTED VERSION, *version-identifier*. THE STATUS IS *version-status*.

Explanation

During preliminary processing, DSNTRIN detected a Db2-supplied native SQL procedure or compiled SQL scalar function that has an unexpected version. This situation usually indicates that a local version of the routine was created. However, Db2 supports only official versions of Db2-supplied routines so processing terminates.

routine-type
The type of routine, SQL PROCEDURE or SQL FUNCTION

routine-name
The schema and specific name of the routine

version-identifier
The version identifier of the unexpected version

version-status
The status of the unexpected version, ACTIVE or INACTIVE

System action

Processing is discontinued.

User response

Drop the indicated unexpected version of the routine and rerun DSNTRIN:

1. If the unexpected version is the active version, use one of the following statements to activate the official version, V1:
   - If the routine type is SQL PROCEDURE:

     ```
     ALTER PROCEDURE routine-name ACTIVATE
     VERSION V1
     ```

   - If the routine type is SQL FUNCTION:

     ```
     ALTER SPECIFIC FUNCTION routine-name
     ACTIVATE VERSION V1
     ```

2. Use one of the following statements to drop the unexpected version:
   - If the routine type is SQL PROCEDURE:

     ```
     ALTER PROCEDURE routine-name DROP VERSION
     version-identifier
     ```

   - If the routine type is SQL FUNCTION:

```
ALTER SPECIFIC FUNCTION routine-name DROP
VERSION version-identifier
```

Severity

12 (severe error)

Related concepts

Job DSNTIJRT (Db2 Installation and Migration)

Related reference

Reserved schema names (Db2 SQL)

Procedures that are supplied with Db2 (Db2 SQL)

DSNT059I ***program-name*** **WLM APPLICATION ENVIRONMENT** ***wlm-environment*** **IS NOT DEFINED**

Explanation

The WLM application environment that was specified to be deleted is not defined to WLM.

program-name
The name of the program.

wlm-environment
The name of the WLM application environment.

System action

No WLM application environment is removed.

The return code for the *program-name* program depends on the option that was specified:

- 4 (warning) for REMOVE_IF_EXISTS or REMIFEXISTS_ACTIVATE
- 8 (error) for REMOVE or REMOVE_ACTIVATE

User response

If you want to remove a WLM application environment, use a name that is defined to WLM.

Severity :
4 (warning) or 8 (error)

Related reference

DSN_WLM_APPLENV stored procedure (Db2 SQL)

DSNTWLMB tool (Db2 Installation and Migration)

DSNT089I **DSNTXTA HAS RECREATED EXPLAIN TABLE INDEX** ***schema-name.index-name*** **ON** ***schema-name.table-name*** **(*key-list*)**

Explanation

The EXPLAIN table index has been dropped and re-created in order to imbed additional keys. These actions are performed only when ALTER INDEX cannot be used to update the index.

schema-name
The name of the table and index schema or creator.

index-name
The name of the index.

table-name
The name of the table.

key-list
The names of the columns, in sequence, used to recreate the index.

System action

Processing continues.

User response

No action is required.

Severity

0 (informational)

Related tasks

Setting up the environment for Java routines (Db2 Application Programming for Java)

DSNT090I **DSNTXTA REQUEST CANCELLED BECAUSE THERE ARE NO EXPLAIN TABLES IN SCHEMA** ***schema-name***

Explanation

The request was cancelled because there are no EXPLAIN tables in the specified schema.

schema-name
The name of the table schema or creator.

System action

Processing terminates.

User response

Verify that you have specified the correct value for the DSNTXTA schema name parameter. If it is correct, then no further action is required for that schema.

Severity

4 (warning)

DSNT091I **DSNTXTA HAS ALTERED EXPLAIN TABLE *schema-name.table-name*. COLUMN *column-name* WAS *change-description***

Explanation

The EXPLAIN table has been modified as indicated.

schema-name
The name of the table schema or creator.

table-name
The name of the table.

column-name
The name of the column.

change-description
The alteration that was made to the EXPLAIN table:

RENAMED TO *new-name*
The column was renamed.

new-name
The new name of the column.

CHANGED FROM *old-type* TO *new-type*
The data type of the column was changed.

old-type
The data type used for the column before the change.

new-type
The data type used for the column after the change.

ADDED AS *data-type*
The column was added to the database.

data-type
The data type used for the new column.

System action

Processing continues.

User response

No action is required.

Severity

0 (informational)

DSNT092I **DSNTXTA DID NOT COMPLETE PROCESSING OF *schema-name.table-name* BECAUSE *reason-text*.**

Explanation

The EXPLAIN table could not be updated to the required format for this version of Db2 for the indicated reason.

schema-name
The name of the table schema or creator.

table-name
The name of the table.

reason-text
The reason for that the table could not be updated:

IT CANNOT BE ALTERED TO A 10-COLUMN TABLE
A 9-column DSN_QUERY_TABLE exists in the indicated schema. A 9-column DSN_QUERY_TABLE cannot be altered to a 10-column DSN_QUERY_TABLE because the new column, GROUP_MEMBER, must reside at position 8.

OF AN UNEXPECTED NAME OR TYPE FOR COLUMN NUMBER *column-number*. EXPECTED: *expected-format*. FOUND: *actual-format*.
While analyzing a table, DSNTXTA encountered a column that has an unexpected name or attribute

column-number
The location of the unexpected name or attribute.

expected-format
The format that is required for the name or attribute.

actual-format
The format that is used for the name or attribute.

COLUMN *column-name* CANNOT BE ADDED PRIOR TO NEW-FUNCTION MODE
Db2 is in a mode prior to new-function-mode. The column cannot be added until Db2 enters new-function-mode

column-name
The name of the column.

System action

Processing of the table that is identified by *schema-name.table-name* is discontinued. Processing continues with the next candidate table, if one exists.

User response

Take the action that is indicated for the *reason-text* value:

IT CANNOT BE ALTERED TO A 10-COLUMN TABLE
Use REXX exec DSNTXTB to generate statements for migrating the 9-column DSN_QUERY_TABLE to a 10-column DSN_QUERY_TABLE. See job DSNTIJXB for an example of how to execute DSNTXTB, and job DSNTIJXC for an example of how to process the generated statements after you have reviewed them and made any required adjustments.

OF AN UNEXPECTED NAME OR TYPE FOR COLUMN NUMBER *column-number*. EXPECTED: *expected-format*. FOUND: *actual-format*.
Either the table is not an EXPLAIN table or it is not in the expected format.

1. Query SYSIBM.SYSCOLUMNS, and inspect the column names and attributes of the table. For example, use the following query:

```
SELECT NAME, COLNO,
    CASE COLTYPE
      WHEN 'TIMESTMP' THEN 'TIMESTAMP'
      ELSE COLTYPE
    END,
  LENGTH ,LENGTH2
  FROM SYSIBM.SYSCOLUMNS
  WHERE TBCREATOR = 'schema-name'
  AND TBNAME = 'table-name'
  ORDER BY COLNO;
```

   Use the information about SYSIBM.SYSCOLUMNS to help you locate the structural problem.
2. If you suspect that the table might not be an EXPLAIN table, review the list of EXPLAIN tables. Compare your table to the expected table of the same name. If the table is not an EXPLAIN table, consider renaming it.
3. If the table is an EXPLAIN table, it is not in the expected format and you must correct the discrepancy. You can either:
   - Alter the table to conform to the format described for the table.
   - Rename the existing table, create a replacement table with the appropriate name in the expected format, and copy the data from the original table to the replacement. When you have confirmed the contents of the replacement table, drop the original table.

COLUMN *column-name* CANNOT BE ADDED PRIOR TO NEW-FUNCTION MODE
Rerun this job when Db2 enters new-function mode.

Severity

4 (warning)

DSNT093I DSNTXTA PROCESSING COMPLETE. SCHEMAS EXAMINED: *total-schemas*; TABLES EXAMINED: *total-tables*; TABLES ALTERED: *total-altered*; INDEXES EXAMINED: *total-indexes*; INDEXES RECREATED: *total-recreated*; TOTAL WARNINGS: *total-warnings*; TOTAL ERRORS: *total-errors*

Explanation

All EXPLAIN tables in the specified schema or schemas are now in the current format, except as noted by previous warning messages. This message reports summary statistics for the DSNTXTA job.

total-schemas
The total number of schemas that were processed.

total-tables
The total number of tables that were processed.

total-altered
The total number of tables that were altered.

total-indexes
The total number of indexes that were processed.

total-recreated
The total number of indexes that were re-created.

total-warnings
The total number of warnings that were issued.

total-errors
The total number of errors that were issued.

System action

Processing terminates.

User response

Review the summary statistics and other DSNT messages that were generated during processing. These messages identify tables that were not updated.

Severity

0 (informational)

DSNT094I DSNTXTB REQUEST CANCELLED BECAUSE THERE ARE NO EBCDIC EXPLAIN TABLES IN SCHEMA *schema-name*

Explanation

The request was cancelled because there are no EBCDIC EXPLAIN tables in the specified schema.

schema-name
The name of the table schema or creator.

System action

Processing terminates.

User response

Verify that you have specified the correct value for the DSNTXTB schema name parameter. If it is correct, then no further action is required for that schema.

Severity

4 (warning)

DSNT095I **DSNTXTB REQUEST CANCELLED BECAUSE TABLE *schema-name.table-name* IS NOT IN THE REQUIRED FORMAT AT COLUMN NUMBER *column-number*. EXPECTED: *expected-format*. FOUND: *actual-format*.**

Explanation

While analyzing a table, DSNTXTB encountered a column that has an unexpected name or attribute.

schema-name
The name of the table schema or creator.

table-name
The name of the table.

column-number
The location of the unexpected name or attribute.

expected-format
The format that is required for the name or attribute.

actual-format
The format that is used for the name or attribute.

System action

Processing terminates.

User response

1. Query SYSIBM.SYSCOLUMNS, and inspect the column names and attributes of the table. For example, use the following query:

```
SELECT NAME, COLNO,
    CASE COLTYPE
      WHEN 'TIMESTMP' THEN 'TIMESTAMP'
      ELSE COLTYPE
    END,
  LENGTH ,LENGTH2
  FROM SYSIBM.SYSCOLUMNS
  WHERE TBCREATOR = 'schema-name'
    AND TBNAME = 'table-name'
  ORDER BY COLNO;
```

   Use the information about SYSIBM.SYSCOLUMNS to help you locate the structural problem.
2. If you suspect that the table might not be an EXPLAIN table, review the list of EXPLAIN tables. Compare your table to the expected table of the same name. If the table is not an EXPLAIN table, consider renaming it.
3. If the table is an EXPLAIN table, it is not in the expected format and you must correct the discrepancy. You can either:
   - Alter the table to conform to the format described for the table.
   - Rename the existing table, create a replacement table with the appropriate name in the expected format, and copy the data from the original table to the replacement. When you have confirmed the contents of the replacement table, drop the original table.

Severity

8 (error)

DSNT096I **WARNING: THE TARGET DATABASE, *database-name*, IS NOT A UNICODE DATABASE**

Explanation

The target database specified for new Unicode explain tables already exists in Db2 and is not a Unicode database by default.

database-name
The name of the database.

System action

Processing continues.

User response

No action is required.

If you prefer to have the new explain tables created in a Unicode database, change the appropriate target database parameter to specify either an existing Unicode database or the name of a new one for which DSNTXTB should generate a CREATE statement. Then rerun DSNTXTB.

Severity

0 (informational)

DSNT097I **DSNTXTB REQUEST CANCELLED BECAUSE THE SPECIFIED TARGET**

***required-type* TABLE SPACE, *database-name.tablespace-name*, IS AN EXISTING *actual-type* TABLE SPACE**

Explanation

The indicated table space already exists in Db2 as a different type of table space than is required.

required-type
The type of table space that was specified as a DSNTXTB input parameter: 4KB page table space, 8KB page table space, 16KB page table space, 8KB page LOB TS, or 32KB page LOB TS.

database-name.tablespace-name
The table space that was the target of the DSNTXTB request.

actual-type
The type of the existing table space that is identified by *database-name.tablespace-name*: 4KB page table space, 8KB page table space, 16KB page table space, 8KB page LOB TS, 32KB page LOB TS, or NON-UNICODE.

System action

Processing terminates.

User response

Correct the DSNTXTB input parameter indicated by *required-type* so that it specifies one of the following names:

- An existing, conforming Unicode-encoded table space.
- A new table space for which DSNTXTB should generate a CREATE statement with the required attributes.

Severity

8 (error)

DSNT098I **DSNTXTB HAS GENERATED STATEMENTS TO CREATE UNICODE EXPLAIN TABLES FOR THE SPECIFIED SCHEMA IN AN EXISTING TARGET TABLE SPACE, *database-name.tablespace-name***

Explanation

The indicated table space already exists in Db2. If the control statements that were generated by this execution of DSNTXTB are processed, this table space will be used as the target table space for new Unicode explain tables.

database-name
The name of the database.

tablespace-name
The name of the table space.

System action

Processing continues.

User response

No action is required.

If you prefer to have the new explain tables created in a different table space, change the appropriate target table space parameter to specify either a different existing Unicode table space or the name of a new one for which DSNTXTB should generate a CREATE statement. Then rerun DSNTXTB.

Severity

0 (informational)

DSNT099I **DSNTXTB HAS GENERATED STATEMENTS FOR MIGRATING TABLE *schema-name.table-name* TO UNICODE**

Explanation

An EBCDIC-encoded explain table was found in the specified schema. One instance of this message is issued for each EBCDIC-encoded explain table.

schema-name
The name of the table schema or creator.

table-name
The name of the table.

System action

Processing continues.

User response

No action is required.

Severity

0 (informational)

DSNT101I **A VSAM ERROR HAS BEEN ENCOUNTERED WHILE CSECT DSNTSTR2 WAS READING THE DB2 BSDS VSAM RETURN CODE = *return-code*, VSAM REASON CODE = *reason-code***

Explanation

CSECT DSNTSTR2 attempted to read the Db2 bootstrap data set (BSDS), and a VSAM error has occurred. *return-code* is a 1-byte VSAM return code and *reason-code* is a 1-byte VSAM reason code.

System action

The start up process continues. However, any references to password-protected system databases will cause a 'resource unavailable' error. Any agent-related requests for subsystem database resources will result in an SQLCODE -904. Any requests that are not agent-related for unavailable resources will result in the following messages:

DSNI001I	DSNI002I	DSNI003I	DSNI004I
DSNI005I	DSNI006I	DSNT408I	DSNT414I
DSNT415I	DSNT416I	DSNT417I	DSNT500I

Abend X'04E' with reason code X'00E30010' is also produced. However, the error results in a retry. Db2 does not terminate, but a dump is produced.

Operator response

Notify the system programmer.

System programmer response

A VSAM error occurred while reading the BSDS record with key '200000001'. Either the BSDS record does not exist or an I/O error occurred (indicating that the record is bad). Further information may be obtained from a VSAM diagnostics manual.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the Db2 print log map (DSNJU004) utility.

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Related concepts

Management of the bootstrap data set (Db2 Administration Guide)

Related information

Recovering from BSDS failures (Db2 Administration Guide)
-904 (Db2 Codes)
00E30010 (Db2 Codes)

DSNT102I DSNTSTR2 - AN INVALID DATABASE SERVICES BOOTSTRAP RECORD HAS BEEN ENCOUNTERED

Explanation

CSECT DSNTSTR2 attempted to read the Db2 bootstrap data set (BSDS), and an invalid record was read by the recovery log manager (RLM) subcomponent. This error is an internal Db2 error.

The invalid record is a database services password record with key '200000001.'

System action

Db2 start-up processing continues.

However, any references to Db2 password-protected system databases cause a resource unavailable condition. Any agent-related requests for unavailable Db2 subsystem database resources result in an SQLCODE -904. Any requests that are not agent-related for unavailable resources result in one or more of the following messages:

- DSNI001I
- DSNI002I
- DSNI003I
- DSNI004I
- DSNI005I
- DSNI006I
- DSNT408I
- DSNT414I
- DSNT415I
- DSNT416I
- DSNT417I
- DSNT500I

Abend X'04E' with reason code X'00E30010' also occurs with message DSNT102I. As a result of this error, Db2 tries the operation again. Db2 does not terminate, but produces a dump.

Operator response

Notify the system programmer.

System programmer response

Collect the information that is identified in the problem determination section and contact IBM Support.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the Db2 print log map (DSNJU004) utility.
-

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Related tasks

Collecting diagnostic data (Collecting data)

Related reference

Db2 abend completion codes (X'04E' and X'04F) (Db2 Codes)

Related information

DSNI001I
RESTART HAS BEEN DEFERRED REASON *reason-code* TYPE *resource-type* NAME *resouce-name*

DSNI002I
csect-name UNABLE TO START OBJECT TYPE *object-type* OBJECT NAME *object-name* REASON *reason-code* TYPE *resource-type* NAME *resource-name*

DSNI003I
csect-name UNABLE TO STOP OBJECT TYPE *object-type* OBJECT NAME *object-name* REASON *reason-code* TYPE *resource-type* NAME *resource-name*

DSNI004I
RESOURCE HAS BEEN STOPPED TYPE *resource-type* NAME *resource-name*

DSNI005I
csect-name LPL OR GRECP RECOVERY CANNOT BE DONE FOR *function-name* - ID = *function-id* OBJECT TYPE *object-type* OBJECT NAME *object-name* REASON *reason-code* TYPE *resource-type* NAME *resource-name*

DSNI006I
csect-name ASYNCHRONOUS GRECP OR LPL RECOVERY IN PROGRESS FOR *function-name* - ID *function-id* TYPE *object-type* NAME *object-name*

DSNT408I
SQLCODE = *-sql-code*, *explanation*

DSNT414I
SQLERRM = xxxx, SQLCA ERROR MESSAGE INSERTION TEXT

DSNT415I
SQLERRP = xxxx, SQL PROCEDURE DETECTING ERROR

DSNT416I
SQLERRD = *field-1*, *field-2*, *field-3*, *field-4*, *field-5*, *field-6* SQL DIAGNOSTIC INFORMATION

DSNT417I
SQLWARNn-n SQL WARNINGS

DSNT500I
csect-name RESOURCE UNAVAILABLE REASON *reason-code* TYPE *resource-type* NAME *resource-name*

-904 (Db2 Codes)

00E30010 (Db2 Codes)

DSNT103I THE CURRENTLY LOADED DSN6SPRM IS NOT THE MVS/XA VERSION

Explanation

A -START DB2 PARM=xxxxxxxx was issued where 'xxxxxxxx' is the version of the system parameter CSECTs. Db2 executes in a MVS/XA environment and will not execute in any other environment.

System action

The message DSNV086E is generated with a reason code of X'00E30008'. Db2 is terminated with abend code X'04F'.

Operator response

Notify the system programmer.

System programmer response

Restart Db2 with a -START DB2 PARM= command, where the parameter block that follows the 'PARM=' parameter specifies an MVS/XA version of the Db2 subsystem parameters.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Listing of DSNZPARM module used.

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DSNT104I THE CURRENTLY LOADED DSN6SPRM IS NOT THE MVS/370 VERSION

Explanation

A -START DB2 PARM=xxxxxxxx was issued, where 'xxxxxxxx' is the version of the system parameter CSECTs. Db2 executes in an MVS/370 environment and does not execute in any other environment.

System action

Message DSNV086E is generated with reason code X'00E30009'. Db2 is terminated with abend code X'04F'.

Operator response

Notify the system programmer.

System programmer response

Restart Db2 with a -START DB2 PARM= command, where the parameter block that follows the PARM= parameter specifies an MVS/370 version of the Db2 subsystem parameters.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Listing of DSNZPARM module used.

.

DSNT105I THE LOADED DSN6SPRM CSECT IS OBSOLETE. PLEASE REASSEMBLE THE DSN6SPRM CSECT AND RELINKEDIT THE DSNZPARM LOAD MODULE.

Explanation

DSNTSTR2 loaded an out-of-date system parameter CSECT DSN6SPRM. This error can only occur if code maintenance has been applied and CSECT DSN6SPRM has not been reassembled. This CSECT is contained in the load module specified in the 'PARM=' parameter of the -START DB2 command.

System action

The message DSNV086E is generated with a reason code of X'00E30008'. Db2 is terminated with abend code X'04F'.

Operator response

Notify the system programmer.

System programmer response

Reassemble DSN6SPRM, and relink-edit the DSNZPARM load module. This is done by resubmitting the installation job stream, DSNTIJUZ, that built the load module that is named following the 'PARM=' parameter of the -START DB2 command.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Listing of DSNZPARM module used.

.

DSNT106I THE LOADED DSN6SYSP CSECT IS OBSOLETE. PLEASE REASSEMBLE THE DSN6SYSP CSECT AND RELINKEDIT THE DSNZPARM LOAD MODULE.

Explanation

DSNTSTR2 loaded an out-of-date system parameter CSECT DSN6SYSP. This error can only occur if code maintenance has been applied and CSECT DSN6SYSP has not been reassembled. This CSECT is contained in the load module specified in the 'PARM=' parameter of the -START DB2 command.

System action

The message DSNV086E is generated with a reason code of X'00E30008'. Db2 is terminated with abend code X'04F'.

Operator response

Notify the system programmer.

System programmer response

Reassemble DSN6SYSP, and relink-edit the DSNZPARM load module. This is done by resubmitting the installation job stream, DSNTIJUZ, that built the load module that is named following the 'PARM=' parameter of the -START DB2 command.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Listing of DSNZPARM module used.

DSNT107I INVALID AMODE OR RMODE ATTRIBUTE FOUND FOR LOAD MODULE *module-name*

Explanation

During Db2 startup, the service controller establishes the addressability to the Db2 database services functional recovery and the emergency shutdown routines. Two load modules, DSNTF, and DSNTLCLE, are loaded into CSA. In the MVS/XA environment, DSNTLCLE must be link-edited with attributes AMODE(24) and RMODE(ANY). At least one of the modules did not have the correct addressing attribute when it was loaded. 'module-name' in the error message is the name of the first load module that has an invalid addressing mode.

System action

Db2 database services start up is terminated.

Operator response

Notify the system programmer.

System programmer response

Verify that all installation and maintenance activities against these modules were executed using SMP. Verify that the JCLIN for SMP includes the correct AMODE and RMODE control statements, and that the linkage editor provided with the Data Facility Product (DFP) was invoked by SMP for the link edits. Correct the procedure or JCL which caused the error and rerun the necessary SMP jobs.

Problem determination

A Db2 dump was requested to an MVS/XA SYS1.DUMP data set.

The MVS service aid AMBLIST provides linkage editor module attributes in the summary section of the LISTLOAD function output.

DSNT108I DB2 HAS DETECTED A DIFFERENCE BETWEEN THE RECORDED SYSTEM CCSIDS AND THE CCSIDS SPECIFIED BY DSNHDECP

Explanation

During Db2 startup, Db2 detected a difference between the CCSIDs recorded in the BSDS and the CCSIDs specified by the version of DSNHDECP, or the user-specified application defaults module, that was loaded during startup. Db2 startup terminated to avoid potential data corruption issues.

System action

Db2 startup is terminated.

Operator response

Notify the system programmer.

System programmer response

Determine the reason for the mismatch between the CCSIDs in the BSDS and the CCSIDs specified by the *dsnhdecp* module that was loaded during startup. Possible reasons for a mismatch include that the

procedure used to start Db2 might have incorrect library concatenations, or, the copy of the *dsnhdecp* module that was loaded was incorrectly copied to the libraries specified by the Db2 startup procedure.

Correct the mismatch. If IBM support directs you, you can use the change log inventory (DSNJU003) utility with the DELETE CCSIDS clause to delete the CCSIDs that are specified in the in the BSDS. **Important:** Do not attempt to delete the CCSIDs in the BSDS unless IBM support instructs you.

Related concepts

Application defaults parameters (Db2 Installation and Migration)

Application defaults module name at start (Db2 Administration Guide)

Related tasks

Specifying CCSIDs in Db2 (Db2 Internationalization Guide)

DSNT109I DB2 HAS DETECTED AN INVALID CCSID IN THE CCSID(S) SPECIFIED FOR ENCODING SCHEME *encoding-scheme* BY DSNHDECP

Explanation

The version of DSNHDECP, or the user-specified application defaults module, that was loaded during Db2 startup has invalid CCSIDs for the *encoding-scheme* encoding scheme. Db2 startup terminated to avoid potential data corruption issues.

System action

Db2 startup is terminated.

Operator response

Notify the system programmer.

System programmer response

If the *dsnhdecp* value for MIXED is NO, the specified CCSIDs must be SBCS CCSIDs. You can find these CCSIDs in the table entitled "Single-byte coded character set identifiers (CCSIDs)".

If the *dsnhdecp* value for MIXED is YES, then you must select ASCII MIXED from the table entitled "ASCII double-byte coded character set identifiers (CCSIDs)", and you must select EBCDIC MIXED CCSIDs from the table entitled "EBCDIC double-byte coded character set identifiers (CCSIDs)".

Unicode CCSID values are pre-filled and you should not change them.

Related concepts

Application defaults parameters (Db2 Installation and Migration)

Application defaults module name at start (Db2 Administration Guide)

Character conversion (Introduction to Db2 for z/OS)

Related tasks

Specifying CCSIDs in Db2 (Db2 Internationalization Guide)

DSNT200I *type bind-type* FOR PLAN *plan-id* SUCCESSFUL

Explanation

A BIND, REBIND or FREE PLAN subcommand has completed successfully.

type
Indicates that a test bind was in progress. A test bind means that no plan name was specified. The token is omitted if a normal BIND PLAN was processed.

bind-type
Type of bind subcommand: BIND, REBIND, or FREE.

plan-id
Name of application plan specified in the subcommand.

System action

The plan was successfully bound, rebound, or freed.

DSNT201I *type bind-type* FOR PLAN *plan-id* NOT SUCCESSFUL

Explanation

Errors have been detected during the processing of the indicated BIND, REBIND, or FREE PLAN subcommand.

type
Indicates that a test bind was in progress. A test bind means that no plan name was specified. The token is omitted if a normal BIND PLAN was processed.

bind-type
Type of bind subcommand: BIND, REBIND, or FREE.

plan-id
Name of application plan specified in the subcommand.

System action

The BIND, REBIND, or FREE PLAN was not performed.

System programmer response

See other messages issued to determine the error that caused the bind subcommand to terminate unsuccessfully.

DSNT202I MESSAGE LIMIT EXCEEDED

Explanation

A fixed amount of space exists in which to generate bind subcommand messages. This message says that the bind subcommand generated more messages than will fit in that space.

System action

For bind subcommands that affect a single plan, the bind subcommand process continues. However, no other messages are generated except for message DSNT200I or DSNT201I. For bind subcommands that affect more than one plan, the bind subcommand process terminates and no other messages are generated.

System programmer response

The 'FLAG' parameter of the bind subcommand can be used to limit the types of messages that are generated.

DSNT203I *bind-type* WARNING FOR *object-type object-name* DBRMS ARE CONVERTED INTO PACKAGES BEFORE *bind-typeobject-typeobject-name*.

Explanation

An attempt was made to bind DBRMs directly into a plan or to rebind a plan with DBRMs that were already bound.

bind-type
The type of BIND subcommand, such as BIND or REBIND.

object-type
The type of object, such as PLAN.

object-name
The name of the application plan.

This message can be caused by using the MEMBER option when binding a plan or by rebinding a plan with DBRMs that were bound in an earlier version of Db2.

System action

The bind process continues and the conversion is completed.

Operator response

No action is required.

Severity

4 (warning)

DSNT204I *bind-type* WARNING FOR *object-type object-name*, *option* IS *option-status*, *substitute-option* WILL BE USED.

Explanation

A BIND subcommand was issued with an invalid option.

bind-type
The type of BIND subcommand, such as REBIND.

object-type
The type of object, such as PLAN or PACKAGE.

object-name
The name of the application plan.

option
The unsupported BIND option.

option-status
The problem with *option*. Possible values are:

INVALID
The BIND option is not valid in the context where it is used.

NOT USED
The BIND option syntax is valid, but the option has no effect.

substitute-option
The BIND option that was used instead of *option*.

This message can be caused by the use of a deprecated option.

System action

The bind process continues, using the option that is indicated by *substitute-option*.

Operator response

No action is required.

Severity

4 (warning)

Related reference
BIND and REBIND options for packages, plans, and services (Db2 Commands)

DSNT205I *name* IS A DUPLICATE *name-type*, IT WILL BE USED ONLY ONCE

Explanation

Name 'name' has been specified more than once in a list of names.

name
Name that was specified more than once.

name-type
Indicates the type of list in which the name was duplicated.

- MEMBER NAME - List of DBRM Members
- PLAN-ID - List of plan IDs
- SYSTEM NAME - List of system connection names on a DISABLE or ENABLE list.
- PACKAGE NAME - List of package IDs

System action

Duplicates are removed from 'name-type' list and the bind process continues.

System programmer response

Verify the list that contains the duplicate. If the error is only in entering a name incorrectly, which happens to duplicate another entry, enter the name correctly and reissue the bind statement. If the entry is really a duplicate, no action is required.

DSNT206I ***bind-type*** **WARNING FOR** ***object-type object-name*** **DEFAULT COLLECTION ID: DSN_DEFAULT_COLLID_***object-name* **IS USED IN THE PACKAGE LIST, POSSIBLE DBRMS ORIGINALLY BOUND WITH THE** ***bind-type*** **HAVE BEEN CONVERTED INTO PACKAGES DURING EXECUTING THE** ***object-type*** **PRIOR TO** ***bind-type***

Explanation

The default collection ID (DSN_DEFAULT_COLLID_*object-name*) has been detected in the package list of the plan during the rebind process.

The default collection ID is the result of an automatic conversion from DBRMs to packages within a plan. This message is issued when such a plan is rebound again. This condition typically happens when the plan contains DBRMs that were directly bound, but that the DBRMs have been converted into packages. This conversion usually happens during an attempt to use the plan in a newer release of Db2 than the one in which it was created.

bind-type
The type of BIND subcommand, such as REBIND.

object-type
The type of object, such as PLAN.

object-name
The name of the application plan.

System action

The rebind process continues and the plan is rebound with the package list.

Operator response

No action is required.

Severity

4 (warning)

DSNT207I **PROGRAM** ***program-name*** **WITH MARK** ***release-dependency-mark*** **FAILED BECAUSE IT DEPENDS ON FUNCTIONS OF THE RELEASE FROM WHICH FALL BACK HAS OCCURRED**

Explanation

Program 'program-name' depends on a function of Db2 that is not supported by the current active release.

program-name
Name of the application program.

release-dependency-mark
A one-character mark showing the oldest Db2 release supporting this program.

System action

The bind operation for this plan or package is not performed.

System programmer response

Warn users not to use plans or packages containing this program until the Db2 subsystem has been remigrated to the newer release.

User response

The program cannot be used until the Db2 subsystem is remigrated to the newer release. Notify the system programmer.

DSNT208I **PROGRAM** ***program-name*** **PRECOMPILED WITH INCORRECT LEVEL FOR THIS RELEASE**

Explanation

Program 'program-name' was precompiled under a release not supported by the current level of Db2, or the contents of the DBRM have been modified after the precompilation phase.

System action

The BIND operation was not performed.

User response

Precompile the named program again using the current precompiler. Reissue the BIND command.

Problem determination

If the application program was precompiled at an appropriate release, and the problem persists, collect the following diagnostic items:

- Hexadecimal print of the first record of the failing DBRM.
- Listing from the precompile job that generated the DBRM.
- Output from the BIND attempt.

.

DSNT209I ***bind-type* FOR PLAN *plan-id* WITH MARK *release-dependency-mark* FAILED BECAUSE PLAN DEPENDS ON FUNCTIONS OF THE RELEASE FROM WHICH FALL BACK HAS OCCURRED.**

Explanation

Plan 'plan-id' depends on a function of Db2 which is not supported by the currently active release.

bind-type
REBIND

plan-id
Name of the application plan

release-dependency-mark
A one-character mark showing the oldest release of Db2 which can support this plan. The release dependency mark for the plan is kept in the IBMREQD columns in the Db2 catalog in SYSIBM.SYSPLAN.

System action

The REBIND operation for this plan is not performed.

Operator response

Notify the system programmer.

System programmer response

Warn users not to use the plan until the Db2 subsystem has been remigrated to the newer release.

User response

The plan cannot be used until the Db2 subsystem is remigrated to the newer release.

DSNT210I ***bind-type* AUTHORIZATION ERROR USING *authorization-id* AUTHORITY PLAN=*plan-id* PRIVILEGE=*privilege***

Explanation

The indicated authorization ID does not have the indicated privilege and therefore cannot invoke the indicated BIND subcommand against the indicated application plan. If the access control authorization exit is active and the AUTHEXIT_CHECK subsystem parameter is set to DB2, this error might occur if ACEE cannot be created for the indicated authorization ID.

bind-type
Type of BIND subcommand: BIND, REBIND, FREE.

authorization ID
Authorization ID of the plan owner. **Note:** If you are using a trusted context, the token *auth-id* might return a role instead of an authorization ID. A role is returned, if a role was in effect and the authorization checking is performed against the role rather than the authorization ID of the session, when the condition was encountered. The role is returned in the following format as a single token: ROLE: *role-name*.

plan-id
Application plan specified in the BIND subcommand.

privilege
Missing privilege: BIND, BINDADD

System action

The BIND, REBIND, or FREE operation for 'plan-id' is not performed.

System programmer response

If the indicated privilege is BINDADD, then the privilege to invoke the BIND subcommand with the ACTION(ADD) option must be granted to the indicated authorization ID. If the indicated privilege is BIND, the privilege to invoke a BIND subcommand against the indicated application plan must be granted to the indicated authorization ID.

If you use the access control authorization exit, ensure that the indicated authorization ID is defined in RACF and granted the indicated privilege in RACF.

DSNT211I **REBIND FOR PLAN *plan-id* FAILED BECAUSE IBMREQD OF *ibmreqd* IS INVALID**

Explanation

The IBMREQD column of the SYSIBM.SYSPLAN catalog table for the named plan contains an unrecognizable character.

System action

The REBIND operation for the plan was not performed.

System programmer response

You must do a BIND ACTION(REPLACE) for this plan.

DSNT212I ***bind-type* AUTHORIZATION ID *auth-id* IN THE OWNER KEYWORD IS INVALID**

Explanation

The authorization ID specified in the OWNER keyword of the BIND or REBIND subcommand is invalid. Specifying an owner that is not the primary authorization ID or one of the secondary IDs of the process requires additional authority.

bind-type
Type of bind subcommand: BIND or REBIND

auth-id
The authorization ID specified as owner.

If you are using a trusted context, the token *auth-id* might return a role instead of an authorization ID. A role is returned, if a role was in effect and the authorization checking is performed against the role rather than the authorization ID of the session, when the condition was encountered. The role is returned in the following format as a single token: `ROLE: role-name`.

System action

The BIND or REBIND subcommand is not executed.

System programmer response

Rerun the subcommand and specify a valid authorization ID for the OWNER bind option. If necessary, add the required authorization ID for this user to the security system.

Related tasks

Establishing or changing plan or package ownership (Managing Security)

Binding application packages and plans (Db2 Application programming and SQL)

Related reference

OWNER bind option (Db2 Commands)

Privileges required for handling plans and packages (Managing Security)

Related information

About Db2 and related commands (Db2 Commands)

DSNT213I **THE DCB BLOCK SIZE OF THE INPUT DBRM LIBRARY IS INVALID**

Explanation

An invalid DCB block size is specified for the DBRM library of the BIND subcommand.

System programmer response

Correct the DCB block size of the DBRM library, and reissue the BIND subcommand.

DSNT214I **I/O ERROR ON DBRM LIBRARY DBRM MEMBER= *dbrm-name* DBRM LIBRARY= *dbrm-library-name xxxxxx***

Explanation

An I/O error occurred during execution of a BIND subcommand when the database request module (DBRM) was read.

dbrm-name
The name of the DBRM or zFS file that is associated with the error.

dbrm-library-name
The partitioned data set or the absolute path of a zFS file that is associated with the error.

xxxxxx
A portion of the message text that was generated by the SYNADAF macro instruction to describe the permanent I/O error. This text might contain information such as the job name, step name, unit address, device type, DD name, the operation that was attempted, and a description of the error.

System action

No application plan is created.

System programmer response

Determine if an incorrect file name was specified in the LIBRARY parameter of the BIND subcommand, or an incorrect data set name was specified for the DBRMLIB DD statement. Check correctly specified data sets for I/O errors or modified DCB attributes.

DSNT215I ***csect-name bind-type bind-subtype* FOR PACKAGE = *package-name* FAILED BECAUSE AT LEAST ONE BIND OPTION IS NOT ALLOWED FOR A *package-type* PACKAGE**

Explanation

The BIND or REBIND subcommand has been submitted with an invalid combination of bind options. The message tokens provides the following information:

csect-name
The name of the control section that issued the message.

bind-type
Type of bind subcommand: BIND or REBIND

bind-subtype
Type of bind subcommand: COPY, DEPLOY, or BLANK.

package-name
Name of the package in the format: *location-id.collection-id.package-id(version-id).package-type*

package-type
Type of package:

- PROCEDURE
- NATIVE SQL PL PROCEDURE
- TRIGGER
- FUNCTION
- REST SERVICE

.

System action

The bind fails.

User response

Remove the incompatible bind options and reissue the command.

Related reference
BIND PACKAGE (DSN) (Db2 Commands)
BIND PLAN (DSN) (Db2 Commands)
REBIND PACKAGE (DSN) (Db2 Commands)
REBIND PLAN (DSN) (Db2 Commands)

Related information
About Db2 and related commands (Db2 Commands)

DSNT216I **REBIND FOR PACKAGE = *package-name* FAILED BECAUSE AT LEAST ONE BIND OPTION SPECIFIED CANNOT BE CHANGED IN CONJUNCTION WITH PLANMGMT.**

Explanation

An attempt was made to rebind a package using the PLANMGMT option, but a new value was indicated for a bind option that cannot be changed from its previous value.

package-name
The name of the package.

When PLANMGMT is specified, the following bind options cannot be changed from their previous values.

- OWNER
- QUALIFIER
- ENABLE
- DISABLE
- PATH
- PATHDEFAULT
- IMMEDWRITE

System action

Command processing terminates.

Operator response

Remove the conflicting REBIND options and re-invoke the command.

Related tasks
Saving and switching to previous access paths (Db2 Performance)

DSNT217I **REBIND SWITCH FOR PACKAGE = *package_name* FAILED BECAUSE THE PREVIOUS OR ORIGINAL COPY DOES NOT EXIST.**

Explanation

An attempt was made to revert to a non-existent PREVIOUS or ORIGINAL copy of a package.

System action

Command processing terminates.

DSNT218I **REBIND FOR PACKAGE = *package_name* FAILED BECAUSE SWITCH CANNOT BE SPECIFIED WITH ANY OTHER REBIND OPTIONS**

Explanation

When attempting to SWITCH to a PREVIOUS or ORIGINAL copy of a package, no other bind options can be specified.

System action

Command processing terminates.

Operator response

Remove the conflicting bind options and issue the command again.

Related tasks

Saving and switching to previous access paths (Db2 Performance)

Related reference

SWITCH bind option (Db2 Commands)

DSNT219I **REBIND FOR PACKAGE = *package_name* SUCCEEDED BUT A PREVIOUS AND/OR ORIGINAL PACKAGE COPY WAS NOT CREATED/REPLACED BECAUSE THE CURRENT PACKAGE COPY WAS INVALID.**

Explanation

When a REBIND PACKAGE command is invoked on an invalid package, any PLANMGMT= BASIC or PLANMGMT=EXTENDED options are ignored. Db2 rebinds the package successfully. However, any previously existing or original copies are not modified.

System action

Command processing terminates.

Operator response

No action is required.

DSNT220I **BIND ADD ERROR USING *auth-id* AUTHORITY PLAN *plan-id* ALREADY EXISTS**

Explanation

An attempt was made to use the BIND subcommand with the 'ACTION(ADD)' option that specified a 'plan-id' that already exists.

auth-id
Authorization ID of the owner of the plan.
Attention: If you are using a trusted context, the token *auth-id* might return a role instead of an authorization ID. A role is returned, if a role was in effect and the authorization checking is performed against the role rather than the authorization ID of the session, when the condition was encountered. The role is returned in the following format as a single token: `ROLE: role-name`.

plan-id
Application plan specified in the BIND subcommand.

System action

No application plan is created.

System programmer response

Check the SYSIBM.SYSPLAN catalog table for names of existing application plans. Reinvoke the BIND subcommand with a 'plan-id' that is not in use.

DSNT221I ***bind-type* ERROR USING *auth-id* AUTHORITY PLAN *plan-id* DOES NOT EXIST**

Explanation

The indicated bind subcommand was issued against an application plan that does not exist. The individual variable fields contain:

bind-type
Type of bind subcommand: REBIND or FREE.

auth-id
Authorization ID of the plan owner.

plan-id
Application plan specified in the BIND subcommand.

System programmer response

Check the SYSPLAN catalog table for the correct 'plan-id' to use.

DSNT222I ***csect-name bind-type* WARNING FOR *object-type = object-name* USE OF OPTHINT RESULTS IN *count-1* STATEMENTS WHERE OPTHINT FULLY APPLIED *count-2* STATEMENTS WHERE OPTHINT NOT APPLIED OR PARTIALLY APPLIED *count-3* STATEMENTS WHERE OPTHINT IS NOT FOUND**

Explanation

The OPTHINT option of Bind or Rebind was specified. This message gives counts of the number of statements where a hint was fully applied, not fully applied, or not found.

csect-name
The name of the csect from which the message was issued.

bind-type
Type of BIND subcommand: BIND or REBIND.

object-type
PLAN or PACKAGE

object-name
If *object-type* is PLAN, *object-name* is the name of the plan.

If *object-type* is PACKAGE, *object-name* is the name of the package in the format 'location-id.collection-id.package-id'.

count 1
The number of statements where hints were found, and all hints found were successfully applied.

count 2
The number of statements where hints were found and at least one of those hints could not be successfully applied.

count 3
The number of statements where there were no matching optimization hints found.

System action

Processing continues normally.

Programmer response

Examine the counts to ensure that the specified optimization hints were applied to the intended statements. Refer to SQL codes +394 and +395 for more information about individual statements.

DSNT223I ***csect-name bind-type* WARNING FOR *object-type = object-name* USE OF OPTHINT IS DISALLOWED BY A DB2 SUBSYSTEM PARAMETER. THE DEFAULT OPTHINT VALUE IS USED.**

Explanation

The Db2 subsystem parameters have not been configured to enable the use of OPTHINT in the *bind-type* subcommand. The default OPTHINT value of all blanks is used.

bind-type
Type of BIND subcommand: BIND or REBIND.

object-type
PLAN or PACKAGE

object-name
If *object-type* is PLAN, *object-name* is the name of the plan.

If *object-type* is PACKAGE, *object-name* is the name of the package in the format 'location-id.collection-id.package-id'.

System action

Processing continues normally using the default OPTHINT value.

System programmer response

Enable the use of OPTHINT by changing the value of OPTIMIZATION HINTS on the Db2 Installation panel, DSNTIP8.

If, after further consideration, you do not want to use OPTHINT, remove OPTHINT from the *bind-type* subcommand or set the value to all blanks.

DSNT224I ***csect-name bind-type* ERROR FOR *object-type object-name* CCSID = *ccsid* IS INVALID FOR ENCODING SCHEME = *scheme***

Explanation

The system does not have a valid CCSID defined for the specified encoding scheme, or the specified CCSID is not defined on the system.

bind-type
Type of bind subcommand: BIND or REBIND.

object-type
PLAN or PACKAGE.

object-name
If object-type is PLAN, object-name is the name of the application. Otherwise, it is the name of the package in 'location.collection.package' format.

scheme
The encoding scheme specified in the ENCODING bind option on the subcommand or defaulted from the system default Application Encoding Scheme. If *scheme* is UNKNOWN, then the CCSID value specified in the ENCODING bind option or defaulted from the system default Application Encoding Scheme is not defined, and therefore the encoding scheme is not known.

ccsid
The numeric CCSID corresponding to the specified *ccsid-type*.

System action

The *bind-type* operation is not performed

System programmer response

If the bind option ENCODING was not specified, and instead the value for ENCODING was defaulted from the system default Application Encoding Scheme, verify the Application Encoding Scheme is set to a defined CCSID.

If the value specified for the ENCODING option was ASCII, EBCDIC or UNICODE, verify the corresponding subsystem parameters on the installation panel DSNTIPF has been set to a defined CCSID. Otherwise, inform the user of the correct CCSID.

User response

Verify that the correct encoding scheme was specified in the ENCODING bind option on the *bind-type* subcommand. If correct, see System Programmer Response and contact the System Programmer. If incorrect, specify the correct scheme in the ENCODING option and reissue the *bind-type* subcommand.

Severity

8 (error)

Related concepts

Introduction to character conversion (Db2 Internationalization Guide)

Related tasks

Setting up Db2 to ensure that it interprets characters correctly (Db2 Internationalization Guide)

Related reference

DSNTIPF: Application programming defaults panel 1 (Db2 Installation and Migration)

ENCODING bind option (Db2 Commands)

DSNT225I ***bind-type* ERROR FOR *object-type object-name*, *bind-option* IS NOT SUPPORTED.**

Explanation

The BIND or REBIND command specified invalid options.

bind-type
They type of bind request: BIND, BIND COPY, or REBIND.

object-type
PLAN or PACKAGE

object-name
The name of the application plan or the package.

bind-option
The unsupported bind option.

System action

The bind process fails.

User response

Correct the bind option, and rerun the BIND or REBIND command.

Problem determination

One condition under which this message is issued is when DBPROTOCOL(PRIVATE) is either specified or implied, and private protocol is not allowed.

Related reference

BIND and REBIND options for packages, plans, and services (Db2 Commands)

DSNT226I ***bind-type* WARNING FOR *object-type object-name*. *bind-option* OPTION IS NOT RECOMMENDED WHEN BINDING PLANS OR PACKAGES**

Explanation

The indicated subcommand was issued with a bind option that is deprecated and no longer recommended for use.

bind-type
Type of bind subcommand: BIND COPY, BIND REPLACE, REBIND, BIND PLAN, or REBIND PLAN.

object-type
PLAN or PACKAGE

object-name
The name of the application plan or the package.

bind-option
The bind option that is deprecated and expected to be unsupported in the future.

System action

The bind process continues.

User response

If DBPROTOCOL(PRIVATE) was explicitly specified for the bind-option that is not recommended, then Db2 issues a warning during the *bind-type* operation on *object-type*. To avoid this warning, rerun the *bind-type* operation on *object-type* specifying

DBPROTOCOL(DRDA) or allow the bind-type operation to default.

Related reference

Deprecated function in Db2 11 (Db2 for z/OS What's New?)

BIND and REBIND options for packages, plans, and services (Db2 Commands)

DSNT227I ***bind-action*** **WARNING FOR SQL PROCEDURE PACKAGE:** ***location-name.collection-id.package-id*****.(*****version-id*****) THE TARGET SERVER WAS NOT ABLE TO RESOLVE STRUCTURE INFORMATION IN THE SOURCE PACKAGE. ADDITIONAL AUTOMATIC REGENERATION PROCESSING WILL OCCUR ON THE TARGET SERVER.**

Explanation

A stored procedure was created in one version of Db2 and bound for use on an earlier version. Some structural information in the new package must be resolved by the target server during the bind process. If the BIND request succeeded, you can use the resulting package on the earlier version.

bind-action
The requested BIND action, such as BIND DEPLOY.

location-name.collection-id.package-id**.(*****version-id*****)**
Identifies the package that was bound.

System action

Processing continues.

User response

No action is required on the Db2 11 subsystem. When you execute the package on the target server, monitor the console output for SQLCODE -904 which indicates that the automatic processing was unsuccessful.

Related tasks

Deploying a native SQL procedure to another Db2 for z/OS server (Db2 Application programming and SQL)

Related reference

BIND PACKAGE (DSN) (Db2 Commands)

BIND and REBIND options for packages, plans, and services (Db2 Commands)

DSNT228I **BIND ERROR, ATTEMPTING TO REPLACE PACKAGE =** ***package_name*** **WITH version=** ***(version2)*** **BUT THIS VERSION ALREADY EXISTS**

Explanation

An attempt is made to create a version of a package that already exists. The version specified in the REPLVER keyword is different from the version specified for the precompile. The version specified for the precompile already exists in the catalog. The combination of 'location.collection.package.version' must be unique in the SYSIBM.SYSPACKAGE catalog table. A common mistake is that the user may believe that the version he is creating is the one specified in the REPLVER keyword. This is not the case. The version specified in the REPLVER keyword is the name of the version being replaced. The version that will be created is the version that was given to the program when it was precompiled.

package_name
Fully qualified package name

version2
Version-id of package that is to be created

System action

The bind will fail.

System programmer response

There are two approaches to solve this problem. The first is to re-precompile the program with a new version name and re-issue the original BIND subcommand. The other approach is not to do the precompile but re-issue the BIND subcommand without the REPLVER parameter.

DSNT229I **BIND ERROR, ATTEMPTING TO REPLACE PACKAGE =** ***package-name*** **THERE ARE ENABLE OR DISABLE ENTRIES CURRENTLY ASSOCIATED WITH THE PACKAGE**

Explanation

The BIND subcommand was issued to replace a package that has ENABLE or DISABLE entries currently associated with the package. The individual variable fields contain:

package-name
Name of the package (location.collection.package)

System action

Package not bound.

System programmer response

FREE the package first and then BIND the package.

DSNT230I **BIND DBRM MEMBER NAME ERROR USING *auth-id* AUTHORITY *object-type = object-name* MEMBER *dbrm-name* NOT FOUND IN PDS SEARCH ORDER**

Explanation

The indicated 'dbrm-name' was not found in the search order in the PDSs specified on the BIND PLAN or BIND PACKAGE subcommand.

auth-id
Authorization ID of the plan or package owner. **Attention:** If you are using a trusted context, the token *auth-id* might return a role instead of an authorization ID. A role is returned, if a role was in effect and the authorization checking is performed against the role rather than the authorization ID of the session, when the condition was encountered. The role is returned in the following format as a single token: `ROLE: role-name`.

object-type
The type of object being bound: PLAN or PACKAGE

object-name
If 'object-type' is PLAN, 'object-name' is the name of the application plan. Otherwise, it is the name of the package in 'location.collection.package' format.

dbrm-name
Member name of the DBRM that was not found.

System action

The bind is unsuccessful.

System programmer response

Determine if an incorrect 'dbrm-member-name' or PDS was specified. Reinvoke the BIND subcommand specifying the correct names.

DSNT231I **BIND DBRM ERROR USING *auth-id* AUTHORITY *object-type = object-name* DBRM *dbrm-name* IS IN AN INCONSISTENT STATE**

Explanation

The contents of a DBRM have been modified after the precompilation process, or the DBRM contains incorrect information in the header.

auth-id
Authorization ID of the invoker of the BIND subcommand. **Attention:** If you are using a trusted context, the token *auth-id* might return a role instead of an authorization ID. A role is returned, if a role was in effect and the authorization checking is performed against the role rather than the authorization ID of the session, when the condition was encountered. The role is returned in the following format as a single token: `ROLE: role-name`.

object-type
The type of object being bound: PLAN or PACKAGE

object-name
If 'object-type' is PLAN, 'object-name' is the name of the application plan. Otherwise, it is the name of the package in 'location.collection.package' format.

dbrm-name
Name of the DBRM that is in error.

System action

The bind is unsuccessful.

System programmer response

Precompile the application program associated with the indicated DBRM. Reinvoke the BIND subcommand.

DSNT232I **SUCCESSFUL *bind-type* FOR PACKAGE = *package-name***

Explanation

A BIND, REBIND or FREE PACKAGE subcommand has completed successfully.

bind-type
Type of bind subcommand: BIND, REBIND, or FREE

package-name
Name of the package in the following format: 'location.collection.package.(version)'

System action

The package was successfully bound, rebound, or freed.

DSNT233I **UNSUCCESSFUL *bind-type* FOR PACKAGE = *package-name***

Explanation

Errors have been detected during the processing of the indicated BIND, REBIND, or FREE PACKAGE subcommand.

bind-type
Type of bind subcommand: BIND, REBIND, or FREE

package-name
Name of the package in the following format: 'location.collection.package.(version)'

System action

The indicated package was not bound, rebound, or freed.

System programmer response

See other messages issued to determine the error that caused the subcommand to terminate unsuccessfully.

DSNT234I MESSAGE LIMIT EXCEEDED

Explanation

A fixed amount of space exists in which to generate bind subcommand messages. This message says that the bind subcommand generated more messages than will fit in that space.

System action

For bind subcommands that affect a single package or service, the bind subcommand process continues. However, no other messages are generated except for completion message DSNT232I or DSNT233I or completion message DSNT276I or DSNT277I for services. For bind subcommands that affect more than one package or service, the bind subcommand process terminates and no other messages are generated.

System programmer response

The 'FLAG' parameter of the bind subcommand may be used to limit the types of messages that are generated.

DSNT235I ***csect-name bind-type*** **AUTHORIZATION ERROR USING** ***auth-id*** **AUTHORITY PACKAGE =** ***package-name*** **PRIVILEGE =** ***privilege***

Explanation

The authorization ID given does not have the *privilege* indicated and cannot invoke the bind subcommand on the named package. If the access control authorization exit is active and the AUTHEXIT_CHECK subsystem parameter is set to DB2, this error might occur if ACEE cannot be created for the indicated authorization ID.

bind-type
Type of bind subcommand: BIND, REBIND, or FREE

auth-id
Authorization ID of the invoker of the BIND subcommand. **Attention:** If you are using a trusted context, the token *auth-id* might return a role instead of an authorization ID. A role is returned, if a role was in effect and the authorization checking is performed against the role rather than the authorization ID of the session, when the condition was encountered. The role is returned in the following format as a single token: `ROLE: role-name`.

package-name
Name of the package in the following format: 'location.collection.package.(version)'

privilege
Name of the privilege not held:

BINDADD or BINDADD *
The authority to create a new package using BIND with the ADD option.

BIND
The authority to BIND (REPLACE) or REBIND a package.

BIND *
The authority to add a new version of an existing package using BIND with the ADD option.

FREE
There is no FREE privilege, but the user needs the proper authority to free the package.

COPY
The authority to COPY from the indicated package.

CREATE IN or CREATE IN *
The authority to create a package in the indicated collection.

A blank and asterisk (*) in the privilege values 'BINDADD *', 'BIND *', and 'CREATE IN *' in the message indicates that the BINDNV subsystem parameter has the value BIND. When ' *' does not appear in these privilege values, the BINDNV subsystem parameter has the value BINDADD.

The BINDNV subsystem parameter affects the authorization required to add a new package or a new version of an existing package to a collection.

System action

The indicated package is not bound, rebound, or freed.

System programmer response

You must grant the indicated privilege to the authorization ID of the package owner. If you use the access control authorization exit, ensure that the

indicated authorization ID is defined in RACF and granted the indicated privilege in RACF.

Related concepts

Access control authorization exit routine (Managing Security)

Related tasks

Binding application packages and plans (Db2 Application programming and SQL)

Related reference

BIND NEW PACKAGE field (BINDNV subsystem parameter) (Db2 Installation and Migration)

Explicit package privileges (Managing Security)

DSNT236I REBIND FOR PACKAGE *package-name* FAILED BECAUSE IBMREQD OF *ibmreqd* IS INVALID

Explanation

The IBMREQD column of the SYSIBM.SYSPACKAGE catalog table for the named package contains an unrecognizable character. This usually means that the package depends on a function of Db2 which is not supported by the currently active release.

package-name
Name of the package in the following format: 'location.collection.package.(version)'

System action

The package was not rebound.

System programmer response

Warn users not to use the package until the Db2 subsystem is remigrated to the newer release.

DSNT237I *csect-name* BIND *sub-type* ERROR USING *auth-id* AUTHORITY PACKAGE = *package-name* ALREADY EXISTS

Explanation

An attempt is made to add a package that already exists. The combination of 'location.collection.package.version' must be unique in the SYSIBM.SYSPACKAGE table. In addition, the combination of 'location.collection.package.consistency-token' must be unique.

sub-type
The sub-type can have the values: COPY, ADD or REPLACE.

auth-id
Authorization ID of the owner of the package. **Attention:** If you are using a trusted context, the token *auth-id* might return a role instead of an authorization ID. A role is returned, if a role was in effect and the authorization checking is performed against the role rather than the authorization ID of the session, when the condition was encountered. The role is returned in the following format as a single token: `ROLE: role-name`.

package-name
Name of the package in the following format: 'location.collection.package.(version)'

System action

No package is created.

System programmer response

Check the SYSIBM.SYSPACKAGE catalog table for names of existing application packages. Re-invoke the BIND subcommand with a 'location.collection.package.version' that is not in use.

DSNT238I *bind-type error-type* USING *auth-id* AUTHORITY PACKAGE = *package-name* DOES NOT EXIST

Explanation

The indicated subcommand was issued against a package that does not exist. The individual variable fields contain:

bind-type
Type of bind subcommand (BIND COPY | BIND REPLACE | REBIND | FREE| BIND PLAN | REBIND PLAN | DROP PACKAGE). If BIND or REBIND PLAN is specified, the package-name refers to a package on the PKLIST for the plan.

error-type
Type of error: WARNING or ERROR.

auth-id
Authorization ID of the invoker of the BIND subcommand.

package-name
Name of the package in the following format 'location.collection.package.(version)'.

System action

Package not rebound or freed.

System programmer response

Check the SYSPACKAGE catalog table for the correct 'location.collection.package.version' to use.

DSNT239I **PLAN *plan-id* CONTAINS NO DBRMS AND NO PACKAGES**

Explanation

A plan with no DBRMs was rebound with the NOPKLIST option specified. This creates an empty plan. No SQL can be executed. The individual variable fields contain:

plan-id
Plan name specified on the REBIND command.

System action

This is a warning message. The REBIND process will continue.

System programmer response

If an empty plan is not expected, reissue the REBIND command with the PKLIST keyword specifying a new list.

DSNT240I ***csect-name bind-type* ERROR, ASTERISK NOT ALLOWED ON REMOTE *bind-type* PACKAGE**

Explanation

When remotely rebinding or freeing a package, an asterisk (*) cannot be specified anywhere in the name of a package. In other words, it is not possible to remotely rebind or free multiple packages.

System programmer response

Remove the asterisk and rebind, or free a specific package.

Related concepts
Considerations for binding packages at a remote location (Db2 Application programming and SQL)
Related reference
REBIND PACKAGE (DSN) (Db2 Commands)
FREE PACKAGE (DSN) (Db2 Commands)

DSNT241I ***bind-type* AUTHORIZATION *error-type* ON PLAN *plan-id* AUTHORIZATION ID *auth-id* NOT AUTHORIZED TO EXECUTE PACKAGE *package-name***

Explanation

The indicated authorization ID does not have EXECUTE authority on the specified package in the package list. If the access control authorization exit is active and the AUTHEXIT_CHECK subsystem parameter is set to DB2, this error might occur if ACEE cannot be created for the indicated authorization ID.

bind-type
Type of bind subcommand: BIND or REBIND

error-type
Type of error: WARNING or ERROR. If VALIDATE(BIND) was specified, this is an ERROR message. Otherwise, it is a WARNING message.

plan-id
Name of application plan specified in the subcommand.

auth-id
Authorization ID of the plan owner. **Attention:** If you are using a trusted context, the token *auth-id* might return a role instead of an authorization ID. A role is returned, if a role was in effect and the authorization checking is performed against the role rather than the authorization ID of the session, when the condition was encountered. The role is returned in the following format as a single token: `ROLE: role-name`.

package-name
Name of the package (collection.package). The location of the package is the local Db2 location name.

System action

If the bind subcommand was invoked with VALIDATE(BIND), the BIND or REBIND operation is not performed. If VALIDATE(RUN) was used then the BIND or REBIND operation will continue.

System programmer response

The indicated plan owner should be granted the EXECUTE privilege on the package. If you use the access control authorization exit, ensure that the indicated authorization ID is defined in RACF and granted the indicated privilege in RACF.

DSNT242I ***bind-type* ERROR USING *auth-id* AUTHORITY NO BIND OR REBIND SUBCOMMANDS ARE ALLOWED FOR THIS AUTHID**

Explanation

The authorization ID is not allowed to perform the indicated 'bind-type' against a plan or package because entries in the RLST table prohibit binding and rebinding by this authorization ID, or all authorization IDs.

bind-type
Type of bind subcommand: BIND or REBIND

auth-id
Authorization ID of the plan or package owner. **Attention:** If you are using a trusted context, the token *auth-id* might return a role instead of an authorization ID. A role is returned, if a role was in effect and the authorization checking is performed against the role rather than the authorization ID of the session, when the condition was encountered. The role is returned in the following format as a single token: ROLE: *role-name*.

System action

The plan or package is not bound or rebound.

System programmer response

If the indicated authorization ID should be allowed to bind, change the entry in the active RLST table.

DSNT243I **BIND ERROR FOR PACKAGE = *pkg-id* CONTOKEN = *'contoken'*X IS NOT UNIQUE SO IT CANNOT BE CREATED**

Explanation

An attempt is made to add or replace a package with a consistency token that is not unique for that package. In other words, the combination of 'location.collection.package.consistency-token' already exists.

pkg-id
Fully qualified name of the package.

contoken
Consistency token in hexadecimal.

System action

The BIND will fail.

System programmer response

Check the SYSIBM.SYSPACKAGE catalog table for names of existing application packages with the indicated consistency token. Re-issue the BIND subcommand such that the 'location.collection.package.consistency-token' is unique within the catalog. The following SQL statement can be used to query the catalog,

```
SELECT COLLID,NAME
FROM loc-id.SYSIBM.SYSPACKAGE
WHERE HEX(CONTOKEN) = 'contokn';
```

DSNT244I ***bind-type* ERROR *keyword* KEYWORD IS NOT SUPPORTED FOR REMOTE PROCESSING**

```
CLUSTERED          = clustered
CLUSTERRATIO       = clusterratio
CLUSTERRATIOF      = clusterratiof
FIRSTKEYCARD       = firstkeycard
FIRSTKEYCARDF      = firstkeycardf
NLEAF              = nleaf
NLEVELS            = nlevels
SPACEF             = spacef
DATAREPREATFACTORF = datarepeatfactorf
```

Explanation

The indicated keyword is not supported for the remote bind or rebind subcommand.

bind-type
Type of bind subcommand: BIND or REBIND

keyword
Name of the keyword that is not supported.

Programmer response

Correct the syntax and reissue the command.

Related reference
BIND PACKAGE (DSN) (Db2 Commands)
BIND PLAN (DSN) (Db2 Commands)
REBIND PACKAGE (DSN) (Db2 Commands)
REBIND PLAN (DSN) (Db2 Commands)

DSNT245I **LOCATION *location* CANNOT BE SPECIFIED. THE LOCAL DB2 IS NOT DEFINED**

Explanation

Since the local Db2 location name is undefined, no location name may be given when specifying a package name on a bind subcommand.

location
Location specified on the bind subcommand.

\

System action

The bind subcommand was not performed.

System programmer response

The location name of the local Db2 must be defined in BSDS if the location is used in the BIND, REBIND, or FREE subcommand.

DSNT246I ***bind-type* FOR PACKAGE *package-name* WITH MARK *release-dependency-mark* FAILED BECAUSE PACKAGE DEPENDS ON FUNCTIONS OF THE RELEASE FROM WHICH FALL BACK HAS OCCURRED**

Explanation

The named package depends on a function of Db2 which is not supported by the currently active release.

bind-type
Type of bind subcommand: REBIND

package-name
Name of the package in the following format: 'location.collection.package.(version)'

release-dependency-mark
A one-character mark showing the oldest release of the Db2 which can support this package. The release dependency mark for the package is kept in the IBMREQD column in the Db2 catalog in SYSIBM.SYSPACKAGE.

System action

The 'bind-type' operation for this package is not performed.

System programmer response

Warn users not to use plans containing this package until the Db2 subsystem has been remigrated to the newer release.

User response

The package cannot be bound until the Db2 subsystem is remigrated to the newer release.

DSNT247I ***bind-type* ERROR *object-type* NOT FOUND FOR *object-type = object-name***

Explanation

You attempted to FREE or REBIND multiple plans or packages using the asterisk (*) but no plans or packages were found.

bind-type
Type of bind subcommand: REBIND or FREE

object-type
Type of object to be freed or rebound: PLAN or PACKAGE

object-name
If object-type is PLAN, object-name is the name of the application plan. Otherwise, it is the name of the package in 'location.collection.package' format.

System action

The REBIND or FREE operation is not performed.

User response

Check the plan or package name. If it is correct, no plans or packages were found and no operation can be performed; otherwise, correct the plan or package name and reissue the REBIND or FREE subcommand.

DSNT249I ***csect-name bind-type* WARNING FOR PLAN *plan-name keyword* LOCATION-ID *location-id* NOT FOUND IN SYSIBM.LOCATION**

Explanation

A 'location-id' was specified on the PKLIST or CURRENTSERVER keyword on a bind subcommand. That location is not defined in the SYSIBM.LOCATIONS table.

bind-type
Type of bind subcommand: BIND or REBIND

plan-name
Name of the plan

keyword
The bind subcommand containing the nonexistent location: PKLIST or CURRENTSERVER

location-id
The nonexistent location

System action

The bind process will continue.

System programmer response

Define the appropriate 'location-ids' in the SYSIBM.LOCATION catalog table prior to executing the plan.

DSNT250I **BIND UNABLE TO OPEN DBRM LIBRARY USING *authorization-id* AUTHORITY *object-type = object-name***

Explanation

The BIND subcommand was unable to open the DBRM partitioned data set(s).

authorization-id
Authorization ID of the invoker of the BIND subcommand.

object-type
PLAN | PACKAGE

object-name
If 'object-type' is PLAN, 'object-name' is the name of the application plan. Otherwise, it is the name of the package in 'location.collection.package' format.

System programmer response

Determine why the BIND subcommand was unable to open the DBRM library, and correct the problem.

User response

Contact the system programmer, providing all material associated with the error.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- SYSPRINT output, including JCL, for the application program or batch job, and system messages that were issued. Make sure that MSGLEVEL=(1,1) on the JOB statement so that all diagnostic information is sent to SYSPRINT.

.

DSNT251I **BIND UNABLE TO LOCATE DBRM LIBRARY MEMBERS USING *authorization-id* AUTHORITY *object-type = object-name***

Explanation

The BIND subcommand received an I/O error while attempting to locate the specified DBRM library member(s).

authorization-id
Authorization ID of the invoker of the BIND subcommand.

object-type
PLAN | PACKAGE

object-name
If object-type is PLAN, object-name is the name of the application plan. Otherwise, it is the name of the package in 'location.collection.package' format.

System programmer response

Correct the reason for the I/O error, and reissue the BIND subcommand.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- SYSPRINT output, including JCL, for the application program or batch job, and system messages that were issued. Make sure that MSGLEVEL=(1,1) on the JOB statement so that all diagnostic information is sent to SYSPRINT.

.

DSNT252I ***csect-name bind-type* OPTIONS FOR PLAN *plan-name***

bind-option *option-value*

...

bind-option *option-value*

Explanation

This message shows the BIND or REBIND options that were used for the plan during bind or rebind processing.

csect-name
The name of the control section that issued the message.

bind-type
The type of operation: BIND or REBIND.

plan-name
The plan that was processed.

bind-option
The name of a BIND PLAN or REBIND PLAN option.

option-value
The value of a BIND PLAN or REBIND PLAN option.

Severity

0 (informational)

DSNT253I ***csect-name bind-type* OPTIONS FOR PLAN *plan-name***

bind-option *option-value*

...

bind-option *option-value*

Explanation

This message shows the BIND or REBIND options that were used for the plan during bind or rebind processing.

csect-name
The name of the control section that issued the message.

bind-type
The type of operation: BIND or REBIND.

plan-name
The plan that was processed.

bind-option
The name of a BIND PLAN or REBIND PLAN option.

option-value
The value of a BIND PLAN or REBIND PLAN option.

Severity

0 (informational)

DSNT254I ***csect-name bind-type*** **OPTIONS FOR PACKAGE =** ***package-name***

bind-option *option-value*

...

bind-option *option-value*

Explanation

This message shows the BIND or REBIND options that were used for the package during bind or rebind processing.

csect-name
The name of the control section that issued the message.

bind-type
The type of operation: BIND or REBIND.

package-name
The package that was processed.

bind-option
The name of a BIND PACKAGE or REBIND PACKAGE option.

option-value
The value of a BIND PACKAGE or REBIND PACKAGE option.

Severity

0 (informational)

DSNT255I ***csect-name bind-type*** **OPTIONS FOR PACKAGE =** ***package-name***

Explanation

This message shows the BIND or REBIND options that were used for the local package during bind or rebind processing.

csect-name
The name of the control section that issued the message.

bind-type
The type of operation: BIND or REBIND.

package-name
The package that was processed.

The message heading text is followed by a list of option names and settings.

System action

Processing continues.

User response

No action is required.

Severity

0 (informational)

Related reference
BIND PACKAGE (DSN) (Db2 Commands)
REBIND PACKAGE (DSN) (Db2 Commands)

DSNT256I **DBRM MEMBER** ***member-name*** **IS EMPTY, A PACKAGE CANNOT BE BOUND**

Explanation

The named DBRM member is empty, a package cannot be created.

System action

No package is created.

DSNT257I **BIND ERROR, PACKAGE** ***package-name*** **CANNOT BE CREATED BECAUSE IT HAS THE SAME NAME AS THE PACKAGE BEING COPIED**

Explanation

The location and collection-id of the package being created are the same as the local location and the collection-id specified with the COPY keyword. You cannot create a package that is the same name as the package being copied.

package-name
Name of the package (location.collection.package.(version))

System action

The package is not bound.

System programmer response

Choose a different collection id for the package you are creating and resubmit the subcommand.

DSNT258I ***bind-type*** **WARNING FOR PLAN** ***plan-name*** **THE LOCATION-ID** ***location-id*** **SPECIFIED IN CURRENTSERVER MAY NEED A PACKAGE LIST**

Explanation

If binding a PLAN with a nonlocal location specified in the CURRENTSERVER, a package list is required using the PKLIST keyword to access any packages at the location specified.

bind-type
Type of bind subcommand: BIND or REBIND

plan-name
Name of plan

location-id
Location of CURRENTSERVER

System action

The bind process will continue.

System programmer response

Add a package list with package(s) that reference the location specified in the CURRENTSERVER or delete the CURRENTSERVER from the BIND or REBIND subcommand.

DSNT259I ***bind-type*** **WARNING FOR PLAN** ***plan-name*** **NO PACKAGES IN THE PACKAGE LIST REFERENCE THE LOCATION-ID** ***location-id*** **SPECIFIED IN CURRENTSERVER**

Explanation

There are no packages in the package list that reference the location specified in the CURRENTSERVER keyword.

bind-type
Type of bind subcommand: BIND or REBIND

plan-name
Name of plan

location-id
Location of CURRENTSERVER

System action

The bind process will continue.

System programmer response

Change 'location-ids' for the packages in the package list to reference the location in the CURRENTSERVER or change the location specified in CURRENTSERVER.

DSNT260I ***csect-name bind-type*** **- THE SUBMITTED PARAMETERS RESULT IN AN INVALID COMBINATION OF** ***bind-option1*** **AND** ***bind-option2*** **FOR** ***object-type*** **=** ***object-name***

Explanation

The BIND or REBIND subcommand has been submitted with an invalid combination of bind option or parameter values.

bind-type
Type of bind subcommand: BIND or REBIND.

object-type
PLAN or PACKAGE

object_name
If *object-type* is PLAN, *object-name* is the name of the application plan.

If *object_type* is PACKAGE, *object_name* is the name of the package in the format *location-id*.*collection-id*.*package-id*.

bind-option1 **and** ***bind-option2***
The invalid combination of bind option values, where *bind-option1* and *bind-option2* are each an option name and value.

If *object-type* is PLAN, then one of the following applies:

- *bind-option1* was used on the REBIND subcommand and *bind-option2* exists in the SYSIBM.SYSPLAN catalog table for PLAN *object-name*, or
- *bind-option2* was used on the REBIND subcommand and *bind-option1* exists in the SYSIBM.SYSPLAN catalog table for PLAN *object-name*.

If *object-type* is PACKAGE, then one of the following applies:

- *bind-option1* was used on the BIND COPY or REBIND subcommand and *bind-option2* exists in the SYSIBM.SYSPACKAGE catalog table for PACKAGE *object-name*, or
- *bind-option2* was used on the BIND COPY or REBIND subcommand and *bind-option1* exists in the SYSIBM.SYSPACKAGE catalog table for PACKAGE *object-name*.

The combination of *bind-option1* and *bind-option2* is not supported by Db2.

System action

The BIND or REBIND process is terminated for the indicated plan or package.

User response

Remove the invalid combination of bind options and reissue the BIND or REBIND command.

Related reference

BIND PACKAGE (DSN) (Db2 Commands)
BIND and REBIND options for packages, plans, and services (Db2 Commands)
BIND PLAN (DSN) (Db2 Commands)
REBIND PACKAGE (DSN) (Db2 Commands)
REBIND PLAN (DSN) (Db2 Commands)
SYSPACKAGE catalog table (Db2 SQL)
SYSPLAN catalog table (Db2 SQL)

DSNT261I ***bind-type* WARNING FOR *object-type = object-name* ALL CONNECTION TYPES ARE DISABLED**

Explanation

All possible connection types are disabled. The plan or package cannot be executed.

bind-type
Type of bind subcommand: BIND or REBIND

object-type
PLAN or PACKAGE

object-name
If object-type is PLAN, object-name is the name of the application plan. Otherwise, it is the name of the package in 'location.collection.package' format.

System action

The bind process will continue.

System programmer response

Delete one or more connection types from DISABLE clause or add a list of connection names associated with one of the connection types (DLIBATCH, CICS, IMSBMP, IMSMPP, or REMOTE. REMOTE is only valid for BIND/REBIND PACKAGE)

DSNT262I ***csect-name bind-type* WARNING - ISOLATION *old-iso* NOT SUPPORTED. CHANGING TO ISOLATION *new-iso***

Explanation

Db2 does not support the isolation level specified on the local BIND or REBIND PACKAGE subcommand. The isolation level specified by *new-iso* is used instead.

System action

Processing continues

User response

If the new isolation level is not satisfactory, change the ISOLATION option on the BIND or REBIND PACKAGE subcommand and rebind the package. Use a value that Db2 supports.

Severity

4

DSNT263I ***csect-name bind-type* FOR *object-type = object-name* FAILED BECAUSE THE *bind-type* DEPENDS ON FUNCTIONS IN A LATER DB2 RELEASE WITH MARK *release-dependency-mark* OR HIGHER**

Explanation

The current Db2 does not support a bind option or feature specified in the indicated bind subcommand. The bind option or feature depends on functions in a later Db2 release.

bind-type
Type of bind subcommand: BIND or REBIND

object-type
PLAN or PACKAGE

object-name
If *object-type* is PLAN, *object-name* is the name of the plan.

If *object-type* is PACKAGE, *object-name* is the name of the package in the format `location-id.collection-id.package-id`.

release-dependency-mark
A one-character mark indicating the oldest Db2 release that can support the bind subcommand.

This message can be issued in one of the following situations:

- When the DSN command explicitly or implicitly uses the name of a Db2 subsystem that does not support a bind option or feature used in the DSN bind subcommand *bind-type*.
- When the DSN command uses a group attachment name for a Db2 data sharing group and the receiving

Db2 data sharing member does not support a bind option or feature used in the DSN bind subcommand *bind-type*.

- When attempting to use new function before new function mode has been enabled.

System action

The *bind-type* operation is not performed.

System programmer response

See the 'User Response' section of this message.

User response

In the DSN command, specify the name of a Db2 subsystem having release dependency mark *release-dependency-mark* or higher that supports all of the bind options or features used in the *bind-type* subcommand.

The IBMREQD columns in the SYSIBM.SYSPLAN or SYSIBM.SYSPACKAGE catalog tables contains the release dependency marks.

Related reference

Db2 catalog tables (Db2 SQL)
SYSPLAN catalog table (Db2 SQL)
SYSPACKAGE catalog table (Db2 SQL)

DSNT264I ***csect-name bind-type bind-subtype* ERROR USING *auth-id* AUTHORITY PACKAGE *package-name* IS A *package-type* PACKAGE**

Explanation

If this error is issued for TRIGGER package, then:

- A DSN subcommand other than REBIND TRIGGER PACKAGE was issued to rebind a trigger package. To rebind a trigger package, use the DSN subcommand REBIND TRIGGER PACKAGE.
- A statement other than DROP TRIGGER was issued to free a trigger package. To free a trigger package, use the SQL statement DROP TRIGGER.
- A DSN BIND subcommand was issued with the COPY option for a trigger. You cannot copy a trigger package for a trigger.

If the error is issued for native SQL procedure package:

- A statement other than the SQL statement DROP PROCEDURE was issued to free a package for a native SQL procedure. To free a native SQL procedure package, you must use the SQL statement DROP PROCEDURE.

If the error is issued for REST SERVICE package, then:

- To replace a REST SERVICE package, you must use the FREE SERVICE and BIND SERVICE commands.

If the error is issued for NON-REST SERVICE package, then:

- A non-REST service package was the object of the FREE SERVICE command. FREE SERVICE can only be used to free a REST SERVICE package.

The message tokens are:

bind-type
Type of bind subcommand: BIND, REBIND, or FREE

bind-subtype
Subtype of bind subcommand: REPLACE, TRIGGER, or DEPLOY

auth-id
Authorization ID of the user that attempted the prohibited action

package-name
Name of the package, in the following format:

```
collection.package
```

package-type
Type of package: TRIGGER, NATIVE SQL PROCEDURE, REST SERVICE.

System action

The package is not copied, rebound, freed, or replaced.

System programmer response

Check the SYSIBM.SYSPACKAGE catalog table for names of existing trigger packages or native SQL procedure packages. Do not issue the specified bind subcommand for a trigger package or a native SQL procedure package.

DSNT265I ***csect-name bind-type bind-subtype* ERROR USING *auth-id* AUTHORITY PACKAGE *package-name* IS NOT A *package-type* PACKAGE**

Explanation

The subcommand REBIND TRIGGER PACKAGE can be used only for trigger packages. The subcommand BIND PACKAGE DEPLOY can be used only for native SQL PL procedure packages. The subcommand FREE PACKAGE can be used only for non-trigger and non-native SQL PL procedure packages.

The message tokens are as follows:

bind-type
Type of bind subcommand: REBIND, FREE

bind-subtype
Subtype of bind subcommand: TRIGGER, DEPLOY

auth-id
Authorization ID attempting the prohibited action

package-name
Name of the package in the following format:

```
'collection.package'
```

package-type
Type of package: TRIGGER, NATIVE SQL PL PROCEDURE

System action

The package specified is not rebound, deployed, or freed.

System programmer response

For a package that is not a trigger package, rebind using the subcommand REBIND PACKAGE. Re-invoke the bind subcommand with a 'collection.package' that is an accepted package.

DSNT266I ***csect-name bind-type* FOR *object-type = object-name* FAILED. THE TOTAL LENGTH OF THE PATH SCHEMA NAME LIST EXCEEDS 254 CHARACTERS WITH SCHEMA NAME *schema-name***

Explanation

Db2 uses the schema name list you specified in the bind option PATH to set the Db2 SQL Path that will be used for the bind process. The SQL Path is a VARCHAR(254) string containing the list of schema names you specified, where each schema name is delimited with double quotes and separated from the next schema name by a comma. The total length of this SQL Path string, including the delimiters and commas, cannot exceed 254 characters. The indicated schema name *schema-name* in the bind option PATH causes the SQL Path string to exceed 254 characters.

bind-type
Type of bind subcommand: BIND or REBIND

object-type
PLAN or PACKAGE

object-name
If *object-type* is PLAN, *object-name* is the name of the plan.

If *object-type* is PACKAGE, *object-name* is the name of the package in the format '*location-id.collection-id.package-id.(version-id)*'.

schema-name
The schema name specified in the bind option PATH causing the SQL Path to exceed 254 characters.

System action

The *bind-type* operation is not performed.

System programmer response

See the 'User Response' section of this message.

User response

In the bind option PATH, specify a schema name list that does not cause the SQL Path to exceed 254 characters.

For more information about the bind option PATH and the schema name list, please see: Command Reference.

DSNT267I ***csect-name bind-type* FOR *object-type = object-name* FAILED. FOR *bind-type* OPTION *option-name*, THE VALUE CONTAINING *string* IS INVALID BECAUSE OF A SYNTAX ERROR OR INVALID CHARACTERS.**

Explanation

A BIND/REBIND command failed because a Db2 parser error SQLCODE was received when Db2 attempted to parse the bind option value.

bind-type
Type of bind subcommand: BIND or REBIND

object-type
PLAN or PACKAGE

option-name
Name of the bind option.

string
The string that has a syntax error or invalid characters.

System action

The package is not bound or rebound.

User response

Check the *string* that is invalid. Modify it and try the command again.

DSNT268I ***csect-name bind-type* FOR *object-type = object-name* FAILED. FOR *bind-type* OPTION *option-name*, THE VALUE OR NAME *string* IS TOO**

LONG. THE MAXIMUM ALLOWABLE LENGTH FOR THE VALUE OR NAME IS *max-size*.

Explanation

A BIND/REBIND command failed because Db2 parser SQLCODE -107 was received when Db2 attempted to parse the bind option value.

bind-type
Type of bind subcommand: BIND or REBIND

object-type
PLAN or PACKAGE

option-name
Name of the bind option.

string
The string that has a syntax error or invalid characters.

max-size
The maximum length allowed.

System action

The package is not bound or rebound

User response

Check the *string* that is too long. Modify it and try the command again.

DSNT269I ***csect-name* Db2 SWITCHED TO THE *copy-indicator* COPY OF PACKAGE *package-name*. THIS COPY IS NOT EXECUTABLE WITHOUT AN EXPLICIT REBIND OR AUTOBIND (REASON=*reason-code*).**

Explanation

The command was successfully processed, but the invalid copy has replaced the current package copy. This copy cannot be used.

csect-name
The name of the control section that issued the message.

copy-indicator
Indicates whether the invalid copy that was used was the previous or original package copy. Expected values are PREVIOUS or ORIGINAL.

package-name
The invalid package, in the format *location-id*.*collection-id*.*package-id*.(*version-id*).

reason-code
A numeric value that indicates why the copy is not executable.

01
The copy is invalid.

02
The copy is from a prior release that is no longer executable without an explicit REBIND or autobind.

System action

The command was successfully processed, but the invalid copy has replaced the current package copy, which cannot be used.

User response

Determine why the package is invalid and resolve that condition before invoking the package. Otherwise, the package will be automatically rebound at the first invocation.

Severity

4 (warning)

Related concepts
Automatic rebinds (Db2 Application programming and SQL)
Changes that invalidate packages (Db2 Application programming and SQL)
Related reference
SYSPACKAGE catalog table (Db2 SQL)
REBIND PACKAGE (DSN) (Db2 Commands)

DSNT270I **THE FOLLOWING SQLCA INFORMATION WAS RETURNED FROM *subsystem-id***

- SQLCODE = *sql-code*
- SQLSTATE = *sql-state*
- SQLERRMT = *sqlca-tokens*
- SQLWARN *warn_fields*

Explanation

A warning or error has been received from a database server using Distributed Relational Database Architecture (DRDA) during remote program BIND processing.

subsystem-id
The database server.

sql-code
A numeric value that indicates why the SQL statement execution was unsuccessful.

sql-state
The corresponding SQLSTATE for the SQLCODE.

sqlca-tokens
Tokens that are passed in the message portion of the SQLCA for problem determination.

warn_fields
The warning information indicators.

System action

See the System Action associated with the indicated SQLCODE.

System programmer response

See the Programmer Response associated with the indicated SQLCODE and/or SQLSTATE. Take note of the warning or error (as indicated in the SQLCODE, SQLSTATE, or one or more of the SQLWARN fields), and determine if a program change is necessary. A change to the application might be necessary or the system programmer might have to be consulted depending on the situation.

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

Related concepts
SQL communication area (SQLCA) (Db2 SQL)
Related reference
Description of SQLCA fields (Db2 SQL)

DSNT271I THE FOLLOWING SQLCA INFORMATION WAS RETURNED FROM *subsystem-id*

- SQLCODE = *sql-code*
- SQLSTATE = *sql-state*
- SQLERRMT = *sqlca-tokens*
- SQLWARN *warn_fields*
- STATEMENT = *statement_number*

Explanation

A warning or error has been received from a database server using Distributed Relational Database Architecture (DRDA) during remote program BIND processing.

subsystem-id
The database server.

sql-code
A numeric value that indicates why the SQL statement execution was unsuccessful.

sql-state
The corresponding SQLSTATE for the SQLCODE.

sqlca-tokens
Tokens that are passed in the message portion of the SQLCA for problem determination.

warn_fields
The warning information indicators.

statement_number
The statement number of the failing statement.

System action

See the System Action associated with the indicated SQLCODE.

System programmer response

Take note of the warning or error (as indicated in the SQLCODE, SQLSTATE, or one or more of the SQLWARN fields), and determine if a program change is necessary. Depending on the situation, a change to the application might be necessary or the system programmer might have to be consulted.

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

Related concepts
SQL communication area (SQLCA) (Db2 SQL)
Related reference
Description of SQLCA fields (Db2 SQL)

DSNT274I ERROR USING SQLDDNAME(*ddname*): *error-text*

Explanation

Db2 could not open or read the data set or file assigned to the *ddname* DD statement in the JCL for the BIND SERVICE subcommand because one or more of the conditions specified in *error-text* occurred.

.

ddname
Name of a data set or file that is specified for the SQLDDNAME parameter of the BIND SERVICE subcommand.

error-text
Description of any of the following conditions that can cause the error:

DDNAME CANNOT BE OPENED
The DD job card is not provided in the JCL or an error prevents the opening of the data set or file. Review all job messages.

INVALID DSORG OR RECFM SPECIFICATION
The data set, the fully-qualified member of a PDS/PDSE library, or the zFS or UNIX file has invalid characteristics. The organization of the data set or file must be sequential. The format must be F (fixed-length records, unblocked), FB (fixed-length records, blocked), V (variable-length records, unblocked), or VB (variable-length records, blocked). Make sure that RECFM=VB is specified with the DD statement when it refers to a zFS or UNIX file.

EMPTY DATASET OR FILE
The end of file is reached before any data is read in.

I/O ERROR DETECTED - *error-desc*
When the *ddname* data set or file is read, an I/O error with *error-desc* is detected. One possible cause for the I/O error "WRNG.LEN.RECORD" is that a member name is not specified along with the PDS or PDSE library name for the *ddname* DD statement. See "SYNADAF Error Descriptions" in the z/OS documentation for more information.

System action

The BIND SERVICE subcommand operation is not performed.

System programmer response

If an I/O error is detected, verify that the data set or file specified for the DD statement is a supported DSORG or RECFM and that the data set or file exists and can be opened.

User response

Verify that the BIND SERVICE job JCL contains a valid *ddname* DD specification. Make sure that the data set or file actually exists, contains a valid SQL statement, and can be opened and read.

Severity

8 (error)

Related reference
BIND SERVICE (DSN) (Db2 Commands)
FREE SERVICE (DSN) (Db2 Commands)

DSNT275I *csect-name bind-type* OPTIONS FOR PACKAGE = *package-name*

Explanation

This message shows the BIND or REBIND options that were used for the local package during bind or rebind processing.

csect-name
The name of the control section that issued the message.

bind-type
The type of operation: BIND or REBIND.

package-name
The package that was processed.

The message heading text is followed by a list of option names and settings.

System action

Processing continues.

User response

No action is required.

Severity

0 (informational)

Related reference
BIND PACKAGE (DSN) (Db2 Commands)
REBIND PACKAGE (DSN) (Db2 Commands)

DSNT276I SUCCESSFUL *bind-type* FOR SERVICE = *service-name*

Explanation

A BIND SERVICE or FREE SERVICE subcommand has completed successfully.

bind-type
Type of bind subcommand: BIND or FREE

service-name
Name of the service in the format of `'location.collection.service.(version)'`

System action

The service is successfully bound or freed.

Related reference
BIND SERVICE (DSN) (Db2 Commands)
FREE SERVICE (DSN) (Db2 Commands)

DSNT277I **UNSUCCESSFUL *bind-type* FOR SERVICE = *service-name***

Explanation

The BIND SERVICE or FREE SERVICE command failed because of errors during the command processing.

bind-type
Type of bind subcommand: BIND or FREE

service-name
Name of the service in the format of `'location.collection.service.(version)'`

System action

The *service-name* service was not bound or freed.

System programmer response

See the preceding error message or messages to determine the cause and respond accordingly.

Related reference
BIND SERVICE (DSN) (Db2 Commands)
FREE SERVICE (DSN) (Db2 Commands)

DSNT278I ***bind-type* SERVICE ERROR FOR *service-name* BECAUSE *error-text***

Explanation

The BIND SERVICE or FREE SERVICE command failed because one or more of the conditions specified in *error-text* occurred.

bind-type
Type of bind subcommand: BIND or FREE

service-name
Name of the package in the format of `'location.collection.service.(version)'`.

error-text
Description of any of the following conditions that can cause the error:

- SERVICE DOES NOT EXIST.
- SERVICE ALREADY EXISTS.
- THE SQL STATEMENT IS NOT SUPPORTED.
- CALL HOST-VARIABLE IS NOT SUPPORTED. USE CALL PROCEDURE-NAME INSTEAD.
- OFFLOAD OF NON-SELECT STATEMENTS IS NOT SUPPORTED.
- STATEMENT CONTAINS UNBALANCED DELIMITERS.
- STATEMENT CONTAINS BOTH HOSTVARS AND PARAMETER MARKERS.
- STATEMENT CONTAINS A ZERO LENGTH HOSTVAR.
- STATEMENT CONTAINS NO HOSTVAR IDENTIFIER AFTER COLON.

System action

The *service-name* service is not bound or freed.

System programmer response

See *error-text* to determine the cause of the error and respond accordingly.

Related reference
BIND SERVICE (DSN) (Db2 Commands)
FREE SERVICE (DSN) (Db2 Commands)

DSNT279I ***csect-name* A REST SERVICE CANNOT BE *bind-result-type* USING THE *bind-type* PACKAGE COMMAND**

Explanation

A BIND PACKAGE COPY or a FREE PACKAGE subcommand was issued to bind or free a REST service. A Db2 REST service can be only bound or freed by using the BIND SERVICE or FREE SERVICE subcommand.

bind-result-type
Result type of bind subcommand: BOUND or FREED

bind-type
Type of bind subcommand: BIND or FREE

service-name
Name of the service in the format of `'location.collection.service.(version)'`

System action

The TSO Attachment Facility is ready for more input.

User response

Use the BIND SERVICE or FREE SERVICE subcommand to bind or free a REST service.

Related reference

BIND SERVICE (DSN) (Db2 Commands)
FREE SERVICE (DSN) (Db2 Commands)

DSNT280I ***bind-command* QUERY FOR *query-type = query-identifier* SUCCESSFUL**

Explanation

A BIND operation has completed successfully.

bind-command
The type of command that resulted in the message:

BIND
For BIND QUERY commands.

FREE
For FREE QUERY commands.

LOOKUP
For BIND QUERY commands when the LOOKUP(YES) option is in effect.

query-type
Information that identifies the query:

QUERYNO
The query is identified by the query number (QUERYNO) in the table DSN_USERQUERY_TABLE.

QUERYID
The query is identified by the query ID (QUERYID) in the table SYSIBM.SYSQUERY.

query-identifier
The query number or query ID, depending on the *query-type* value.

When *bind-command* is LOOKUP, an instance of the DSNT280I message is issued for each row in the DSN_USERQUERY_TABLE that does not have matching rows in both the SYSIBM.SYSQUERY and SYSIBM.SYSQUERYPLAN catalog tables.

System action

Processing continues.

User response

No action is required.

Related tasks

Specifying optimization parameters at the statement level (Db2 Performance)

Related reference

BIND QUERY (DSN) (Db2 Commands)
DSN_USERQUERY_TABLE (Db2 Performance)
SYSQUERY catalog table (Db2 SQL)

Related information

DSNT281I
bind-command QUERY FOR *query-type = query-identifier* NOT SUCCESSFUL. REASON: *reason-text*

DSNT290I
bind-command QUERY COMMAND COMPLETED

DSNT291I
bind-command QUERY COMMAND NOT SUCCESSFUL. REASON: *reason-text*

DSNT281I ***bind-command* QUERY FOR *query-type = query-identifier* NOT SUCCESSFUL. REASON: *reason-text***

Explanation

Errors were detected during processing of a BIND QUERY or related operation on a query.

bind-command
The type of command that resulted in the message:

BIND
For BIND QUERY commands.

FREE
For FREE QUERY commands.

LOOKUP
For BIND QUERY commands when the LOOKUP(YES) option is in effect.

query-type
Information that identifies the query:

QUERYNO
The query is identified by the query number (QUERYNO) in the table DSN_USERQUERY_TABLE.

QUERYID
The query is identified by the query ID (QUERYID) in the table SYSIBM.SYSQUERY.

query-identifier
The query number or query ID, depending on the *query-type* value.

reason-text
reason-text is one of the following values:

1. PACKAGE INFORMATION IS INVALID
The specified package information is not valid

2. THE HINT, OPTION, OR OVERRIDE WAS NOT FOUND
The LOOKUP option was specified and the specified hint, option, or override was not found in the catalog tables.

3. THE STATEMENT TEXT CONTAINS AN ERROR
The statement text contains an error.

4. THE STATEMENT TYPE IS NOT SUPPORTED
The statement is of a type that is not supported by the BIND QUERY command.

5. BIND QUERY DOES NOT SUPPORT *package-type* PACKAGES
The query is from a package of a type that is not supported by the BIND QUERY command. Example values for *package-type* might include:

- 'TRIGGER'
- 'PROCEDURE'
- 'FUNCTION'

6. THE *qualified-table-column* COLUMN CONTAINS AN INVALID VALUE = *invalid-value*
The input table column that is identified by *qualified-table-column* contains an invalid value, which is provided as *invalid-value*.

7. A REQUIRED *object-type qualifier.object-name* DOES NOT EXIST
The specified object does not exist.

8. THE *qualified-table-column* COLUMN FOR PREDNO *predno-value* CONTAINS AN INVALID VALUE = *invalid-value*
The input table column that is identified by *qualified-table-column* contains an invalid value, which is provided as *invalid-value*. *predno-value* identifies the PREDNO value of the row that contains the invalid value.

9. THE *qualified-table-column* COLUMN CONTAINS AN INVALID COMBINATION OF VALUES: *invalid-combination*
qualified-table-column identifies a column that contains an invalid combination of values in several rows. Example values for *invalid-combination* include:

NON-MATCHING WEIGHT VALUES FOR ROWS WITH THE SAME INSTANCE VALUE: *instance-value*
For each query, every row with the same instance value must of have the same weight value.

SUM OF INSTANCE WEIGHTS > 1.0
For each query, the sum of weights for all instance values must be less-than or equal to 1.0.

NUMBER OF DISTINCT INSTANCE VALUES *instance-count* IS GREATER THAN *max-instances*.
Too many instances where specified. Db2 supports only as many instances as the value specified by *max-instances*

10. THE *qualified-table-column* COLUMN CONTAINS AN INVALID COMBINATION OF VALUES FOR PREDNO = *predno-value*: *invalid-combination*
The input table column that is identified the *qualified-table-column* value contains an invalid combination of values in several rows. Example *invalid-combination* values might include:

- `MULTIPLE ROWS CONTAIN THE SAME INSTANCE VALUE` *`instance-value`*
- `DUPLICATE ROWS EXIST FOR THE SAME COMPOUND PREDICATE`

The *predno-value* identifies the PREDNO value of the rows that contain the invalid combination of values.

11. INPUT TABLE COLUMNS CONTAIN INCOMPATIBLE VALUES *additional-information*
The value of *additional-information* is a string that identifies the reason that the command failed. Examples might include:

- THE VALUE OF THE STARJOIN COLUMN CANNOT BE 'Y' WHEN MORE THAN ONE SELECTIVITY INSTANCE EXISTS
- A VALUE IN THE PREDNO COLUMN OF DSN_SELECTIVITY TABLE DOES NOT EXIST IN DSN_PREDICATE_TABLE
- NONE OF THE FOLLOWING VALUES CONTAINS A 'Y' VALUE: ACCESSPATH_HINT, SELECTIVITY_OVERRIDE, AND OPTION_OVERRIDE
- ONE OF THE FOLLOWING COLUMNS CONTAINS A BLANK VALUE: ACCESSPATH_HINT, SELECTIVITY_OVERRIDE, AND OPTION_OVERRIDE. ALL MUST CONTAIN VALUES WHEN ANY IS SPECIFIED

When *bind-command* is LOOKUP, an instance of the DSNT281I message is issued for each row in the DSN_USERQUERY_TABLE that has matching rows in both the SYSIBM.SYSQUERY and SYSIBM.SYSQUERYPLAN catalog tables.

System action

The query is not processed.

System programmer response

Use the information provided in this code and other messages issued in conjunction with this one to determine the reason why the query could not be processed.

Related tasks

Specifying optimization parameters at the statement level (Db2 Performance)

Overriding predicate selectivities at the statement level (Db2 Performance)

Related reference

BIND QUERY (DSN) (Db2 Commands)

DSN_USERQUERY_TABLE (Db2 Performance)

SYSQUERY catalog table (Db2 SQL)

SYSQUERYPLAN catalog table (Db2 SQL)

SYSQUERYOPTS catalog table (Db2 SQL)

SYSQUERYSEL catalog table (Db2 SQL)

SYSQUERYPREDICATE catalog table (Db2 SQL)

Related information

DSNT280I
bind-command QUERY FOR *query-type* = *query-identifier* SUCCESSFUL

DSNT290I
bind-command QUERY COMMAND COMPLETED

DSNT291I
bind-command QUERY COMMAND NOT SUCCESSFUL. REASON: *reason-text*

DSNT282I ***bind-command* QUERY AUTHORIZATION ERROR USING *authorization-id* AUTHORITY**

Explanation

A BIND operation was invoked by an authorization ID that does not have the required authorization.

bind-command
The BIND operation: BIND, REBIND, or FREE.

authorization-id
The authorization ID of the invoker of the command.

System action

The operation is not performed.

User response

Resubmit the command from an authorization ID that has the required authorization.

DSNT284I **THE *command-name* COMMAND ONLY PROCESSES DYNAMIC SQL QUERIES. ANY HINTS (SOURCE = 0) WERE NOT PROCESSED.**

Explanation

An attempt was made to rebind or free a static SQL statement or a hint.

command-name
The BIND command that was issued: REBIND or FREE.

System action

The requested operation is not performed.

User response

No action is required.

DSNT285I ***csect-name bind-type* FOR *object-type* = *object-name* USE OF APCOMPARE RESULTS IN *count-1* STATEMENTS WHERE COMPARISON IS SUCCESSFUL *count-2* STATEMENTS WHERE COMPARISON IS NOT SUCCESSFUL *count-3* STATEMENTS WHERE COMPARISON COULD NOT BE PERFORMED.**

Explanation

csect-name
The name of the control section that issued the message.

bind-type
The type of bind subcommand: BIND or REBIND

object-type
The type of object: PACKAGE

object-name
The name of the package.

count-1
The number of statements where previous access path was identical to the incoming access path.

count-2
The number of statements where previous access path was not identical to the incoming access path.

count-3
The number of statements where the comparison could not be performed. This could happen either because the previous access path was not found, or because the no new access path was generated.

The sum of the total counters in message DSNT285I might be larger than the number of static statements in the package. The sum of counters is equal to number of the statements in the SYSIBM.SYSPACKSTMT table. If the sum is larger than the number of static statements in the package, one or more statements might have been bound twice, which occurs in the following situations:

- SYSTIMESENSITIVE is set to YES, and the statement references a system-period temporal table or bitemporal table.
- The ARCHIVESENSITIVE bind option is set to YES, and the statement references an archive table.

For more information about why these statements are bound twice, see the APCOMPARE bind option information.

System action

If APCOMPARE(WARN) was specified, the command proceeds normally. If APCOMPARE(ERROR) was specified, the command aborts. If APREUSE(ERROR) was specified, and *count-2* is a non-zero value, the command aborts.

User response

Determine whether the APCOMPARE usage reported in the message matches the expected result. If EXPLAIN(YES) or EXPLAIN(ONLY) was used, refer to the PLAN_TABLE.REMARKS column for more information about individual statements that failed the access path comparison.

Related tasks

Reusing and comparing access paths at bind and rebind (Db2 Performance)

Analyzing access path changes at bind or rebind (Db2 Performance)

Related reference

APCOMPARE bind option (Db2 Commands)

ARCHIVESENSITIVE bind option (Db2 Commands)

SYSTIMESENSITIVE bind option (Db2 Commands)

PLAN_TABLE (Db2 Performance)

SYSPACKSTMT catalog table (Db2 SQL)

DSNT286I ***csect-name bind-type*** **FOR** ***object-type = object-name*****, USE OF APREUSE RESULTS IN** ***count-1*** **STATEMENTS WHERE APREUSE IS SUCCESSFUL** ***count-2*** **STATEMENTS WHERE APREUSE IS EITHER NOT SUCCESSFUL OR PARTIALLY SUCCESSFUL** ***count-3*** **STATEMENTS WHERE APREUSE COULD NOT BE PERFORMED** ***count-4*** **STATEMENTS WHERE APREUSE WAS SUPPRESSED BY OTHER HINTS.**

Explanation

This message reports information about the reuse of access paths.

csect-name
The name of the control section that issued the message.

bind-type
The type of bind subcommand: BIND or REBIND

object-name
The type of object: PACKAGE

object-name
The name of the PACKAGE in the format *location-id.collection-id.package-id*.

count-1
The number of statements where the previous the access path was successfully applied.

count-2
The number of statements where the previous access path could not be applied. Reuse fails for the package when this value is not zero.

count-3
The number of statements where the previous access path could not be reused. This situation happens either because the previous access path was not found or because a new access path was not generated. Some common reasons are that the query used REOPT(ALWAYS) or VALIDATE(RUN) bind behavior, or the package was bound before DB2 9.

count-4
The number of statements where the previous access path was not used because of the use of other types of hints such as PLAN_TABLE or SYSIBM.SYSQUERYPLAN hints.

The sum of the total counters in message DSNT286I might be larger than the number of static statements in the package. The sum of counters is equal to number of the statements in the SYSIBM.SYSPACKSTMT table. If the sum is larger than the number of static statements in the package, one or more statements might have been bound twice, which occurs in the following situations:

- SYSTIMESENSITIVE is set to YES, and the statement references a system-period temporal table or bitemporal table.
- The ARCHIVESENSITIVE bind option is set to YES, and the statement references an archive table.

For more information about why these statements are bound twice, see the APREUSE bind option information.

System action

The command terminates and no changes are applied.

User response

Determine whether the APREUSE usage reported in the message matches the expected result. If EXPLAIN(YES) or EXPLAIN(ONLY) was used, refer to the PLAN_TABLE.HINT_USED column for more information about individual statements.

Related tasks

Reusing and comparing access paths at bind and rebind (Db2 Performance)

Analyzing access path changes at bind or rebind (Db2 Performance)

Related reference

APREUSE bind option (Db2 Commands)

ARCHIVESENSITIVE bind option (Db2 Commands)

SYSTIMESENSITIVE bind option (Db2 Commands)

PLAN_TABLE (Db2 Performance)

SYSPACKSTMT catalog table (Db2 SQL)

DSNT287I ***module-name command-name*** **FOR QUERYID =** ***query-id*** **FAILED BECAUSE THE CURRENT COPY DOES NOT EXIST**

Explanation

An attempt was made to rebind or free a static SQL statement or a hint.

module-name
The name of the Db2 module that issued this message.

command-name
The BIND command that was issued.

query-id
The query ID, as specified in the SYSIBM.SYSQUERY table.

System action

Processing continues.

User response

No action is required.

DSNT288I **REBIND PACKAGE DID NOT PRESERVE THE PREVIOUS AND/OR ORIGINAL ACCESS PATHS FOR STATIC SQL STATEMENTS IN PACKAGE =** ***package-name*** **BECAUSE THEY WERE IDENTICAL TO THE NEW ACCESS PATHS**

Explanation

The new access path is identical to the previous access path, the original access path, or both. The older access paths were not saved.

package-name
The name of the package.

System action

Processing continues.

User response

No action is required.

DSNT289I ***bind-command*** **QUERY COMMAND INVOKED BY THE DSNE PROCESSOR UNDER THIS ENVIRONMENT. THE COMMAND CAN PROCESS ONLY THE FIRST APPLICABLE QUERY. ALL OTHER QUERIES ARE NOT PROCESSED.**

Explanation

Multiple queries were issued, but the command is able to process only the first query.

bind-command
The BIND operation: BIND, REBIND, or FREE.

System action

The first query is processed. Remaining queries are not processed.

User response

No action is required.

DSNT290I ***bind-command*** **QUERY COMMAND COMPLETED**

Explanation

A BIND QUERY or related command has completed.

bind-command
The type of command that resulted in the message:

BIND
For BIND QUERY commands.

FREE
For FREE QUERY commands.

LOOKUP
For BIND QUERY commands when the LOOKUP(YES) option is in effect.

When *bind-command* is LOOKUP, a single instance of the DSNT290I message is issued if the SYSIBM.SYSQUERY and SYSIBM.SYSQUERYPLAN catalog tables contain some rows that match the rows in DSN_USERQUERY_TABLE.

System action

Processing continues.

System programmer response

Look for other messages that might indicate that individual queries were not processed successfully.

Related tasks
Specifying optimization parameters at the statement level (Db2 Performance)
Related reference
BIND QUERY (DSN) (Db2 Commands)
DSN_USERQUERY_TABLE (Db2 Performance)
SYSQUERY catalog table (Db2 SQL)
Related information
DSNT280I
bind-command QUERY FOR *query-type* = *query-identifier* SUCCESSFUL

DSNT281I
bind-command QUERY FOR *query-type* = *query-identifier* NOT SUCCESSFUL. REASON: *reason-text*

DSNT291I
bind-command QUERY COMMAND NOT SUCCESSFUL. REASON: *reason-text*

DSNT291I *bind-command* QUERY COMMAND NOT SUCCESSFUL. REASON: *reason-text*

Explanation

The command could not be initiated because of one or more errors.

bind-command
The type of command that resulted in the message:

BIND
For BIND QUERY commands.

FREE
For FREE QUERY commands.

LOOKUP
For BIND QUERY commands when the LOOKUP(YES) option is in effect.

reason-text
Additional information that explains why the operation was unsuccessful. Example reason text values include:

- `1. A REQUIRED object-type qualifier.object-name DOES NOT EXIST`
- `2. qualifier.table-name IS EMPTY`
- `ZPARM OPTHINTS IS SET TO NO`

When *bind-command* is LOOKUP, a single instance of the DSNT291I message is issued if the SYSIBM.SYSQUERY and SYSIBM.SYSQUERYPLAN catalog tables contain no rows that match the rows in DSN_USERQUERY_TABLE.

System action

No queries are processed.

System programmer response

Use the information provided in the *reason-text* and other messages issued in conjunction with this one to determine the reason why the command terminated.

Related tasks
Specifying optimization parameters at the statement level (Db2 Performance)
Related reference
BIND QUERY (DSN) (Db2 Commands)
DSN_USERQUERY_TABLE (Db2 Performance)
SYSQUERY catalog table (Db2 SQL)
Related information
DSNT280I
bind-command QUERY FOR *query-type* = *query-identifier* SUCCESSFUL

DSNT281I
bind-command QUERY FOR *query-type* = *query-identifier* NOT SUCCESSFUL. REASON: *reason-text*

DSNT290I
bind-command QUERY COMMAND COMPLETED

DSNT292I *csect-name bind-type* PACKAGE = *package-name*, DB2 WAS UNABLE TO FIND A PRE-EXISTING PACKAGE TO OBTAIN PRIOR ACCESS PATHS. APCOMPARE AND/OR APREUSE OPTIONS WERE IGNORED.

Explanation

The package identified in the message was last bound or rebound on a release prior to DB2 9. For APCOMPARE and APREUSE to work, the package must first be bound or rebound on DB2 9 or later. The RELBOUND column in the SYSIBM.SYSPACKAGE or SYSIBM.SYSPACKCOPY catalog tables indicates the Db2 release on which a package or package copy was last bound or rebound.

csect-name
That name of the control section that issued the message.

bind-type
The type of bind subcommand: BIND or REBIND

package-name
The name of the package in the following format: '*location-id.collection-id.package-id*

System action

Processing continues.

User response

No action is required.

Related tasks

Reusing and comparing access paths at bind and rebind (Db2 Performance)

Analyzing access path changes at bind or rebind (Db2 Performance)

DSNT294I ***csect-name bind-type*** **PACKAGE =** ***package-name*****, TO PROCESS APCOMPARE AND/OR APREUSE, PRIOR ACCESS PATHS FROM VERSION** ***prior-version*** **WERE USED.**

Explanation

csect-name
That name of the control section that issued the message.

bind-type
The type of bind subcommand: BIND or REBIND

package-name
The name of the package in the following format: '*location-id.collection-id.package-id*

prior-version
The version of the package that was used for the prior access paths.

System action

Processing continues.

User response

No action is required.

Related tasks

Reusing and comparing access paths at bind and rebind (Db2 Performance)

Analyzing access path changes at bind or rebind (Db2 Performance)

DSNT295I ***bind-type*** **WARNING FOR QUERY =** ***query-identifier*** **REASON:** ***reason-text***

Explanation

A warning condition was encountered during BIND QUERY processing.

bind-type
Whether the LOOKUP option was specified in the BIND subcommand that resulted in the message.

BIND
The LOOKUP option was not specified.

LOOKUP
The LOOKUP option was specified.

query-identifier
The unique identifier for the query that corresponds to the values of the QUERYID columns in the and *user-ID*.DSN_USERQUERY_TABLE SYSIBM.SYSQUERY tables.

reason-text
A string value that described the reason for the message. Example *reason-text* values include:

1. SYMBOL & IS ENCOUNTERED
The statement text for a statement-level optimization hint contains the ampersand symbol (&). The presence of the ampersand symbol indicates that the hint applies to a cached dynamic SQL statement and that the CONCENTRATE STATEMENTS WITH LITERAL VALUES option is expected when the statement is prepared.

2. *qualifier*.DSN_USERQUERY_TABLE.ACCESSPATH_HINT AND *qualifier*.DSN_USERQUERY_TABLE.OPTION_OVERRIDE ARE BOTH SET TO BLANK. THE *qualifier*.DSN_USERQUERY_TABLE OPTIONS ARE IGNORED
Values were found in the some of the DSN_USERQUERYR_TABLE columns that specify option values, but the value of the OPTION_OVERRIDE column does not indicate that option overrides are specified. The option values are ignored.

System action

The hints is created successfully, or the lookup is successful.

User response

Verify that the specified statement is eligible for literal replacement, and the CONCENTRATE STATEMENTS WITH LITERAL VALUES is specified when the statement is prepared.

Related concepts

Reoptimization for statements with replaced literal values (Db2 Performance)

Conditions for statement sharing (Db2 Performance)

Related reference

PREPARE (Db2 SQL)

BIND QUERY (DSN) (Db2 Commands)

DSNT296I ***subsystem-id*** **BIND QUERY WARNING: THE PLAN_TABLE IS DOWN-LEVEL. PLEASE MIGRATE TO V10 LEVEL FOR BEST RESULT**

Explanation

When a BIND QUERY command was issued, rows were read from a PLAN_TABLE instance that has an obsolete format.

subsystem-id
The Db2 subsystem identifier.

System action

Processing continues.

User response

For best results, convert the PLAN_TABLE to the format for the current Db2 release.

Related tasks

Migration step 24: Convert EXPLAIN tables to the current format (Db2 Installation and Migration)

Related reference

BIND QUERY (DSN) (Db2 Commands)

PLAN_TABLE (Db2 Performance)

ADMIN_EXPLAIN_MAINT stored procedure (Db2 SQL)

DSNT297I ***csect-name bind-type*** **WARNING FOR object-type =** ***object-name*** **USE OF SELECTIVITY OVERRIDES RESULTS IN** ***count-1*** **STATEMENTS WHERE SELECTIVITY OVERRIDES ARE FULLY APPLIED** ***count-2*** **STATEMENTS WHERE SELECTIVITY OVERRIDES ARE INVALID** ***count-3*** **STATEMENTS WHERE SELECTIVITY OVERRIDES ARE NOT FOUND**

Explanation

During bind or rebind one or more statements matched a query in SYSIBM.SYSQUERY catalog table for which selectivity overrides were specified. This message gives counts of the number of statements for which selectivity overrides were fully applied, invalidated, or not found.

csect-name
The name of the control section that issued the message.

bind-type
Type of BIND subcommand: BIND or REBIND

object-type
PLAN or PACKAGE

object-name
If *object-type* is PLAN, *object-name* is the name of the plan.

If *object-type* is PACKAGE, *object-name* is the name of the package in the format '*location-id*.*collection-id*.*package-id*'.

count-1
The number of statements for which selectivity overrides were found, and all selectivity overrides were successfully applied.

count-2
The number of statements for which selectivity overrides were found but were not applied because one of more overrides were found to be invalid,

count-3
The number of statements for which no selectivity overrides were found.

System action

Processing continues.

Programmer response

Examine the counts to ensure that the specified selectivity overrides were applied to the intended statements.

Severity

0 (informational)

SQLSTATE

Related tasks

Overriding predicate selectivities at the statement level (Db2 Performance)

DSNT298I ***csect-name*** **ATTEMPT TO USE COMMAND OR OPTION** ***command-option*** **WHEN THE APPLICATION COMPATIBILITY IS SET FOR A PREVIOUS LEVEL**

Explanation

A BIND or REBIND command was issued which requires a Db2 feature which is not supported by the current application compatibility setting.

csect-name
The name of the control section that issued the message.

command-option
The command name or command option which generated the error.

System action

The command cannot be processed.

System programmer response

Correct the command or command option to remove the dependency on the Db2 feature which is not supported by the current application compatibility setting. The application compatibility setting is set by one of the following methods:

1. Issuing a BIND or REBIND of the package with the APPLCOMPAT option
2. Issuing a BIND or REBIND of the package without the APPLCOMPAT option which defaults to the APPLCOMPAT value from SYSIBM.SYSPACKAGE
3. Issuing a BIND or REBIND of the package which defaults to the APPLCOMPAT system parameter value

Related concepts

Application compatibility levels in Db2 (Db2 Application programming and SQL)

Related reference

BIND and REBIND options for packages, plans, and services (Db2 Commands)

SYSPACKAGE catalog table (Db2 SQL)

DSNT299I **NO INACTIVE COPIES EXIST FOR PACKAGE =** ***package-name***

Explanation

This message is issued when the FREE PACKAGE command is issued with the PLANMGMTSCOPE(INACTIVE) option, and the specified package has no inactive copies.

package-name
The name of the package that is being freed.

System action

The system takes no action.

User response

This is an informational message. No action is needed.

DSNT300I **AUTH-ID** ***authorization-id*** **NOT AUTHORIZED TO PERFORM** ***function*** **ON DATABASE** ***dbname*****. REQUEST REJECTED**

Explanation

The invoker's 'authorization-id' as designated by AUTHORIZATION ID is not authorized to perform the specified database control command function on this database. The 'function' is either -START, -STOP, or -DISPLAY. The name of the database is 'dbname'.

If the operation involves an implicit database or an object in an implicit database, then the applicable privilege is not held on the implicit database, on database DSNDB04. In this case, the owner of the object is not involved in performing the operation.

System action

The request is rejected.

System programmer response

The privilege to issue the command must be granted to the indicated 'authorization-id'.

User response

Notify the system programmer.

If the table space is in an implicit database, then obtain the appropriate authorization privileges on the implicit database or DSNDB04.

DSNT301I **INVALID DATABASE** ***dbname***

Explanation

The databases named in the -START, -STOP, or -DISPLAY DATABASE command do not exist. The name of the database is 'dbname'.

System action

The request is rejected. This message may be repeated.

System programmer response

Reissue the command with a valid name.

DSNT302I **INVALID NAME *spname***

Explanation

In the message, 'spname' is the name of the table space or index space. The 'spname' specified in the SPACENAM keyword on the -START, -STOP, or -DISPLAY DATABASE command does not exist.

System action

The request is rejected. This message may be repeated.

System programmer response

Reissue the command with a valid table space name or index name.

DSNT304I ***csect-name* INSTALLATION SYSOPR IS NOT AUTHORIZED TO CHANGE OBJECT STATUS ON DATABASE *dbname*. REQUEST IS REJECTED.**

Explanation

INSTALLATION SYSOPR is not authorized to perform the START DATABASE command function on this database because the command can change an objects status in this database. INSTALL SYSOPR can use the START DATABASE command only to recover LPL pages or GRECP objects. The name of the database is *dbname*.

System action

The request is rejected.

Operator response

Reissue the -START DATABASE command using the correct access mode or contact your system programmer.

DSNT305I **SUBSYSTEM FAILURE DURING *command-name* DATABASE COMMAND PROCESSING. RC = *return-code*, REASON = *reason-code***

Explanation

An error occurred while processing a Db2 command.

command-name
The name of the command that was being processed when the failure occurred. *command-name* can have one of the following values:

DISPLAY
DISPLAY DATABASE command

START
START DATABASE command

STOP
STOP DATABASE command

return-code* and *reason-code
The reason for the error.

return-code is a 4-byte return code.

reason-code is a 4-byte reason code.

The values of *return-code* and *reason-code* depend on which control section (CSECT) issued the message, as follows:

CSECT DSNTDCST:

- For relational data system (RDS) subcomponent errors:
  - *return-code* is 8.
  - *reason-code* is abend code 00E30085.
- For data manager (DM) subcomponent errors:
  - *return-code* consists of a 2-byte return code and a 2-byte reason code that is returned by the data manager function that is invoked by DSNTDCST.
  - *reason-code* is abend code 00E30086.

A record is written to SYS1.LOGREC, and an SVC dump is requested before the execution unit is abended.

CSECT DSNTDDIS:

- *return-code* is 12.
- *reason-code* is abend code 00E30089.

The request is abended.

CSECTs DSNTDMUL or DSNTDMSG:

- *return-code* is a return code that is returned by the message generator.
- *reason-code* is abend code 00E30084.

The request is abended.

CSECT DSNTDSTP:

- *return-code* is 00000074.

- *reason-code* is internal reason code 00E30064.

The STOP DATABASE command has failed.

This internal reason code indicates that an unexpected error occurred during Db2 catalog lookup for the STOP DATABASE command. Review the current messages in the Db2 MSTR address space and retry the command after any related error conditions have been corrected.

System action

The actions are described in the explanation for each CSECT.

System programmer response:
Refer to the information for the particular abend reason code that was issued.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Source listing of the failing application program.

Related reference

-DISPLAY DATABASE (Db2) (Db2 Commands)
-START DATABASE (Db2) (Db2 Commands)
-STOP DATABASE (Db2) (Db2 Commands)

Related information

00E30084 (Db2 Codes)
00E30085 (Db2 Codes)
00E30086 (Db2 Codes)
00E30089 (Db2 Codes)

DSNT306I RESPONSE MESSAGE LIMIT HAS BEEN REACHED

Explanation

A fixed amount of space exists in which to generate DISPLAY, START, or STOP database command messages. This message indicates that the DISPLAY, START, or STOP database command that was specified generated more messages than will fit in that space.

User response

Specify individual databases and/or table spaces rather than specifying '*' (that is, all names).

DSNT307I INVALID RANGE SPECIFICATION *string1* IS GREATER THAN *string2*

Explanation

A range was specified on a DISPLAY DB(string1:string2) or DISPLAY DB(..) SPACENAM(string1:string2) command or on a database command (START DB, STOP DB, or DISPLAY DB) on PART(string1:string2) keywordwhere the first string, specified alphanumerically, collates after the second string.

User response

Specify the command again. Make sure the first string does not alphanumerically collate after the second string specified.

DSNT308I AFTER KEYWORD ONLY VALID FOR A SINGLE DATABASE OR A SINGLE TABLESPACE/ INDEXSPACE WITHIN A DATABASE. REQUEST REJECTED

Explanation

The AFTER keyword may be specified by one of the following:

- A single database name after the keyword DATABASE
- A single table space name or index space name after the keyword SPACENAM.

User response

Specify the command correctly.

DSNT309I *csect-name object_name* IS CURRENTLY *state*.

Explanation

One of the following is already in the requested state:

- A database listed in START DB(list) or STOP DB(list)
- A table space listed in START DB(name) SPACENAM(list) or STOP DB(name) SPACENAM(list)
- An index space listed in START DB(name) SPACENAM(list) or STOP DB(name) SPACENAM(list)
- A partition of a partitioned table space listed in START DB(list) SPACENAM(list) PART(n), STOP DB(list) SPACENAM(list) PART(n), START DB(list) SPACENAM(list), or STOP DB(list) SPACENAM(list)

In the message:

- The 'object' is the database, table space, index space or partition number with table space name or the index space name.
  - TABLESPACE, if the specified table space was currently in the requested state
  - INDEXSPACE, if the specified index space was currently in the requested state
  - DATABASE, if the database was currently in the requested state
  - PARTITION, if the specified partition of a partitioned table space or partitioned index was currently in the requested state
- The 'state' is:
  - START RW, if the specified object is currently started read/write
  - START RO, if the specified object is currently started read only
  - START UT, if the specified object is currently started for utility processing
  - STOPPED, if the specified object is currently stopped or is stopping
  - STOP PENDING, if the specified object currently is in stop pending status.

If there are pages in the logical page list (LPL) for the object, or if the object is in group buffer pool recovery pending (GRECP) status, a START DATABASE ACCESS(RO) or START DATABASE ACCESS(RW) command triggers a recovery of that object even if this message is issued for that object. For each object that has LPL or GRECP recovery that is initiated, Db2 issues a DSNI006 message followed by either a DSNI021 message (when the recovery completes successfully) or a DSNI005 message (when the recovery is unsuccessful).

User response

No response is necessary. This message is informational only.

DSNT310I ***csect-name*** **ALL** ***object*** **CURRENTLY** ***state*****.**

Explanation

A database and all of its table spaces and index spaces are already in the requested state. This occurred following the processing of one of these commands:

- START DB(*)
- STOP DB(name)
- START DB(name) SPACENAM(*)
- STOP DB(name) SPACENAM(*).

In this message:

- The 'object' is either:
  - TABLESPACE(S) if the specified table space was currently in the requested state
  - INDEXSPACE(S) if the specified index space was currently in the requested state
  - DATABASE(S) if the database was currently in the requested state.
- The 'state' is either:
  - START RW if the specified table space is currently started read/write
  - START RO if the specified table space is currently started read only
  - START UT if the specified table space is currently started for utility processing
  - STOPPED if the specified table space is currently stopped, has a stop pending against it, or is stopping.

If there are pages in the logical page list (LPL) for the object, or if the object is in group buffer pool recovery pending (GRECP) status, a START DATABASE ACCESS(RO) or START DATABASE ACCESS(RW) command triggers a recovery of that object even if this message is issued for that object. For each object that has LPL or GRECP recovery that is initiated, Db2 issues a DSNI006 message followed by either a DSNI021 message (when the recovery completes successfully) or a DSNI005 message (when the recovery is unsuccessful).

User response

No response is necessary. This message is informational only.

DSNT311I **MESSAGE LIMIT EXCEEDED. DISPLAY IS TERMINATED.**

Explanation

The number of messages generated exceeds the maximum number of messages specified in the LIMIT keyword or exceeds the system default.

DSNT312I ***object name*** **MUST BE STARTED RW. NO ACTION TAKEN.**

Explanation

The ACCESS keyword is either RO or UT, and the object must be started ACCESS (RW).

In the message, 'object' is either:

- TABLESPACE(S) IN if the START DB(name) SPACENAM(...) is specified, or
- DATABASE if the START DB(name) is specified.

DSNT313I **ACCESS(FORCE) IS VALID ONLY WITH EXPLICIT TABLESPACE OR INDEXSPACE NAMES. COMMAND IS REJECTED**

Explanation

The ACCESS(FORCE) keyword can be specified when either:

- A single table space or index space name appears after the keyword SPACENAM in a START DATABASE command.
- A list of table space and/or index space names appears after the keyword SPACENAM in a START DATABASE command.

Operator response

Specify the command correctly.

DSNT314I ***csect_name* INVALID PARTITION SPECIFICATION FOR OBJECT *object-name***

Explanation

The PART keyword is invalidly specified in a START DATABASE, STOP DATABASE, or DISPLAY DATABASE command.

The PART keyword is invalid if it is specified for:

- A nonpartitioned table space
- A nonpartitioned type 1 index
- A type 2 index not defined on a partitioned table space

The object *object-name* can be either a table space or an index space.

No action for this table space or index space is performed by the START DATABASE, STOP DATABASE or DISPLAY DATABASE command.Any other valid table space or index space specified is processed by the command.

System action

The command is not processed for the table space or index space in question. All other valid table spaces or index spaces specified in the command are processed.

User response

Resubmit the command for the nonpartitioned table space or index space without using the PART keyword.

Problem determination

SYSIBM.SYSTABLESPACE in the Db2 catalog indicates whether a table space is partitioned. SYSIBM.SYSINDEXSPACE in the Db2 catalog indicates whether an index space is partitioned and whether the index space is a type 1 or a type 2 index. Type 2 nonpartitioned indexes can be started, stopped, or displayedat the logical partition level; type 1 cannot.

Severity

8 (error)

DSNT315I ***csect_name* INVALID PARTITION NUMBER OR RANGE SPECIFIED - *part-num*FOR OBJECT *object-name***

Explanation

An invalid partition number or rangewas specified in the PART keyword for a START DATABASE, STOP DATABASE or DISPLAY DATABASE command.

Partition number or range *part-num*is invalid for the object *object-name*.

System action

The part number or rangeis ignored. All other valid partitions specified are processed if PART was specified as list.

User response

Determine the correct partition specification for the table space or index that was the subject of the specified command and resubmit the command.

Problem determination

SYSIBM.SYSTABLESPACE in the Db2 catalog indicates the correct range of partition numbers for the table space. SYSIBM.SYSINDEXSPACE in the Db2 catalog indicates whether an index space is partitioned and whether the index space is a type 1 or a type 2 index. Type 2 indexes can be started, stopped, or displayedat the logical partition level; type 1 cannot.

Severity

8 (error)

DSNT316I ***csect-name* A LOGICAL PARTITION OF AN INDEX WHICH HAS PAGES IN THE LPL OR HAS BEEN MARKED GRECP CANNOT BE STARTED FOR RW OR RO ACCESS**

Explanation

The START DATABASE command was specified for a logical partition of a nonpartitioned index which has pages in the logical page list (LPL) or is marked group buffer pool recovery pending (GRECP). To start a nonpartitioned index with one of these exception conditions, the START DB command must be specified without the PART keyword.

System action

The command is not processed for the index space. All other valid table spaces or index spaces specified in the command are processed.

User response

Submit the command for the nonpartitioned index space without using the PART keyword.

Problem determination

If more information on the status of the index space is required, use the -DISPLAY DATABASE command.

Severity

8 (error)

DSNT317I ***csect-name*** **ANY USER-DEFINED INDEXES ON DSNDB06 COULD NOT BE** ***cmd-type*** **DUE TO A RESOURCE UNAVAILABLE ON THE CATALOG OR DIRECTORY.**

Explanation

If user-defined indexes exist on DSNDB06, they could not be displayed, started or stopped (depending on *cmd-type*) because the catalog or directory was not available. Db2-defined indexes and table spaces are not affected by this unavailability.

System action

Any user-defined indexes on DSNDB06 were not affected by the command issued. All other table spaces and index spaces were processed by the command.

Programmer response

When you get this message, correct the resource unavailable problem and reissue the command.

DSNT318I ***csect-name*** **PLAN=*plan-name* WITH CORRELATION-ID=*correlation-id* CONNECTION-ID=*connection-id* LUW-ID=*luw-id* THREAD-INFO=*thread-information* TIMED OUT BECAUSE OF A P-LOCK HELD BY MEMBER** ***member-name***

Explanation

A plan cannot get an IRLM lock because the resource is held by a P-lock in the data sharing group, and the maximum amount of time to wait for the locked resource was exceeded.

csect-name
The name of the control section that issued the message.

plan-name
The name of the executing plan that is associated with this thread.

correlation-id
The correlation identifier of the thread that is associated with the plan identified by *plan-id*. Correlation IDs that begin with values between 001 and 028 identify system agents.

connection-id
The connection identifier of the plan identified by *plan-name*.

luw-id
The logical unit of work identifier (LUWID) of *plan-name*.

*****
The thread does not have a LUWID.

luw-id=token
The logical unit of work ID and a five-digit token value. The token value can be used in any Db2 command that accepts a LUWID as input.

thread-information
Information about the thread. The information is presented in a colon-delimited list that contains the following segments:

- The primary authorization ID that is associated with the thread.
- The name of the user's workstation.
- The ID of the user.
- The name of the application.
- The statement type for the previously executed statement: dynamic or static.
- The statement identifier for the previously executed statement, if available. The statement identifier can be used to identify the particular SQL statement. For static statements, the statement identifier correlates to the STMT_ID column in the SYSIBM.SYSPACKSTMT table. For dynamic statements, the statement identifier correlates to the STMT_ID column in the

DSN_STATEMENT_CACHE_TABLE table. That statement might not have contributed to the current failure.

- The name of the role that is associated with the thread.
- The correlation token that can be used to correlate work at the remote system with work performed at the Db2 subsystem. The correlation token, if available, is enclosed in '<' and '>' characters, and contains three components, separated by periods:
  - A 3 to 39 character IP address.
  - A 1 to 8 character port address.
  - A 12 character unique identifier.

  An asterisk (*) in any segment indicates that the information is not available.

member-name
The name of the member of theDb2 subsystem that holds the conflicting P-lock.

System action

Processing continues.

The SQLCA that corresponds to the correlation ID, connection ID, and LUWID contains the name of the resource that is involved in the timeout and one of the following SQL codes: -904, -911 , -913, or -923.

System programmer response

Identify the member that holds the P-lock and determine why the P-lock is not being released. If the problem persists and no other method of releasing the P-lock can be found, consider recycling the member of the group holding the P-lock.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- SYSABEND, SYSUDUMP, or SYSMDUMP output.

Related information

-904 (Db2 Codes)
-911 (Db2 Codes)
-913 (Db2 Codes)
-923 (Db2 Codes)

DSNT319I ***csect-name command-name*** **PROCESSING SKIPPED AT LEAST ONE UNAVAILABLE OBJECT**

Explanation

The processing for the *command-name* command skipped at least one unavailable object that was specified in the command. The object was in an unavailable state, a lock could not be acquired on the object, or the object did not exist. Db2 issues this message only one time per command instance.

csect-name
The name of the control section that issued the message.

command-name
The name of the one of the following commands:

- START DATABASE
- STOP DATABASE
- ACCESS DATABASE
- DISPLAY DATABASE

System action

The unavailable object is skipped and the command processing continues with the next object.

User response

Investigate the status of objects that were specified in the command. If necessary, retry the command after the unavailable resource situation is resolved.

Severity

0 (informational)

Related reference

-START DATABASE (Db2) (Db2 Commands)
-STOP DATABASE (Db2) (Db2 Commands)
-ACCESS DATABASE (Db2) (Db2 Commands)
-DISPLAY DATABASE (Db2) (Db2 Commands)

DSNT320I ***csect-name bind-type*** **FOR PACKAGE =** ***package-name*** **FAILED.** ***bind-type*** **OPTION** ***option-name*** **IS USED BUT IS INVALID BECAUSE DB2 SUBSYSTEM PARAMETER ACCEL = NO, AND THIS DB2 SUBSYSTEM IS NOT ENABLED FOR QUERY ACCELERATION.**

Explanation

A BIND or REBIND PACKAGE that specifies the QUERYACCELERATION or GETACCELARCHIVE bind options failed because the Db2 subsystem is not enabled for query acceleration.

csect-name
The name of the control section that issued the message.

bind-type
The type of bind subcommand: BIND or REBIND.

package-name
The fully qualified name of the package in the following format: 'location.collection.package.(version)'.

option-name
The bind option QUERYACCELERATION or GETACCELARCHIVE.

System action

The named package is not bound.

User response

Change the value of the ACCEL subsystem parameter to AUTO or COMMAND to enable the Db2 subsystem for query acceleration. You cannot change the ACCEL subsystem parameter online. You must stop and restart Db2 for a change to ACCEL to take effect.

If you cannot change the ACCEL subsystem parameter, you must remove the QUERYACCELERATION and GETACCELARCHIVE bind options.

DSNT321I ***csect-name bind-type*** **FOR PACKAGE =** ***package-name*** **FAILED.** ***bind-type*** **OPTION** ***option-name*** **IS USED BUT IS INVALID BECAUSE THE DB2 TABLE SYSACCEL.SYSACCELERATEDPACKAGES OR ITS INDEXES DO NOT EXIST OR ARE NOT DEFINED CORRECTLY.**

Explanation

A BIND or REBIND PACKAGE that specifies the QUERYACCELERATION or GETACCELARCHIVE bind options failed because the Db2 table SYSACCEL.SYSACCELERATEDPACKAGES or its indexes do not exist or are not defined correctly. These bind options require that these SYSACCEL objects are created correctly before running BIND or REBIND PACKAGE.

Db2 supplies the DDL for these objects in job DSNTIJAS. If the DDL was run but modified from its original form, the objects might not be created according to the correct specifications.

csect-name
The name of the control section that issued the message.

bind-type
The type of bind subcommand: BIND or REBIND.

package-name
The fully qualified name of the package in the following format: 'location.collection.package.(version)'.

option-name
The bind option QUERYACCELERATION or GETACCELARCHIVE.

System action

The named package is not bound.

User response

Create the SYSACCEL.SYSACCELERATEDPACKAGES table and its indexes by running the DDL that is supplied in job DSNTIJAS. Do not modify the DDL unless directed by IBM Support. If the DDL was modified incorrectly, contact IBM Support for assistance.

If you cannot correctly create the SYSACCEL.SYSACCELERATEDPACKAGES table and its indexes, you must remove the QUERYACCELERATION and GETACCELARCHIVE bind options.

DSNT322I ***csect-name bind-type*** **FOR PACKAGE =** ***package-name*** **FAILED, BECAUSE THE DB2 TABLE SYSACCEL.SYSACCELERATEDPACKAGES OR ITS INDEXES ARE NOT DEFINED CORRECTLY.**

Explanation

A REBIND or BIND COPY PACKAGE failed because the SYSACCEL.SYSACCELERATEDPACKAGES table or its indexes exist but are not defined correctly. Even though the QUERYACCELERATION or GETACCELARCHIVE bind options are not specified on the REBIND or BIND COPY subcommand, if these SYSACCEL objects exist, Db2 must read the SYSACCEL.SYSACCELERATEDPACKAGES table to determine if the package was previously bound with QUERYACCELERATION. If these SYSACCEL objects do not exist, Db2 does not try to use them if REBIND or BIND COPY does not specify the QUERYACCELERATION or GETACCELARCHIVE options.

Db2 supplies the DDL for these objects in job DSNTIJAS. If the DDL was run but modified from its original form, the objects might not be created according to the correct specifications.

csect-name
The name of the control section that issued the message.

bind-type
The type of bind subcommand: BIND or REBIND.

package-name
The fully qualified name of the package in the following format: 'location.collection.package.(version)'.

System action

The named package is not bound.

User response

If you want Db2 to use the SYSACCEL.SYSACCELERATEDPACKAGES table and its indexes, verify that you ran the DDL that is supplied in job DSNTIJAS. Do not modify the DDL unless directed by IBM Support. If the DDL was modified incorrectly, contact IBM Support for assistance.

If you cannot correctly create the SYSACCEL.SYSACCELERATEDPACKAGES table and its indexes, you must remove the QUERYACCELERATION and GETACCELARCHIVE bind options.

DSNT323I ***csect-name bind-type*** **FOR PACKAGE =** ***package-name*** **FAILED.** ***bind-type*** **OPTION** ***option-name*** **IS USED BUT IS INVALID BECAUSE THE DB2 SYSACCEL TABLES OR INDEXES DO NOT EXIST OR ARE NOT DEFINED CORRECTLY.**

Explanation

A BIND or REBIND PACKAGE that specifies the QUERYACCELERATION or GETACCELARCHIVE bind options failed because the Db2 SYSACCEL tables or indexes do not exist or are not defined correctly. These bind options require that these SYSACCEL objects are created correctly before running BIND or REBIND PACKAGE.

Db2 supplies the DDL for the SYSACCEL objects in job DSNTIJAS. If the DDL was run but modified from its original form, the objects might not be created according to the correct specifications.

csect-name
The name of the control section that issued the message.

bind-type
The type of bind subcommand: BIND or REBIND.

package-name
The fully qualified name of the package in the following format: 'location.collection.package.(version)'.

option-name
The bind option QUERYACCELERATION or GETACCELARCHIVE.

System action

The named package is not bound.

User response

Create the Db2 SYSACCEL objects by running the DDL that is supplied in job DSNTIJAS. Do not modify the DDL unless directed by IBM Support. If the DDL was modified incorrectly, contact IBM Support for assistance.

If you cannot correctly create the SYSACCEL objects, you must remove the QUERYACCELERATION and GETACCELARCHIVE bind options.

DSNT324I ***csect-name bind-type*** **FOR PACKAGE =** ***package-name*** **FAILED, BECAUSE THE DB2 SYSACCEL TABLES OR INDEXES ARE NOT DEFINED CORRECTLY.**

Explanation

A REBIND or BIND COPY PACKAGE failed because Db2 detected that SYSACCEL objects exist but are not defined correctly. Even though the QUERYACCELERATION or GETACCELARCHIVE bind options are not specified on the REBIND or BIND COPY subcommand, if these SYSACCEL objects exist Db2 must use them to determine if the package was previously bound with QUERYACCELERATION. If these SYSACCEL objects do not exist, Db2 does not use them if REBIND or BIND COPY do not specify QUERYACCELERATION or GETACCELARCHIVE.

Db2 supplies the DDL for these objects in job DSNTIJAS. If the DDL was run but modified from its original form, the objects might not be created according to the correct specifications.

csect-name
The name of the control section that issued the message.

bind-type
The type of bind subcommand: BIND or REBIND.

package-name
The fully qualified name of the package in the following format: 'location.collection.package.(version)'.

System action

The named package is not bound.

User response

If you want Db2 to use the SYSACCEL objects that you created, verify that you ran the DDL that is supplied in job DSNTIJAS. Do not modify the DDL unless directed by IBM Support. If the DDL was modified incorrectly, contact IBM Support for assistance.

If you cannot correctly create the SYSACCEL objects, you must remove the QUERYACCELERATION and GETACCELARCHIVE bind options.

DSNT325I INVALID PARTITION SPECIFICATION - CHECK SYNTAX

Explanation

The value of the PART keyword in one of the following commands does not follow the documented specification for single partitions, partition lists, or ranges of partitions.

- ACCESS DATABASE
- DISPLAY DATABASE
- START DATABASE
- STOP DATABASE

System action

The value of the PART keyword cannot be processed correctly. The command is not executed.

User response

Correct the specification of the PART keyword value according to the documentation.

DSNT326I *csect-name bind-type* WARNING FOR PACKAGE = *package-name*. THE ACCELERATOR *accelerator-name* DOES NOT EXIST OR HAS NOT BEEN STARTED.

Explanation

The BIND or REBIND subcommand referenced an accelerator server that does not exist or that has not been started. The specified accelerator might not be defined to Db2 or has not been started since Db2 was last started.

csect-name
The name of the control section that issued the message.

bind-type
The type of bind subcommand: BIND or REBIND.

package-name
The fully qualified name of the package in the following format:

```
location-name.collection-id.package-id.
(version-id)
```

accelerator-name
The name of the accelerator that does not exist or that has not been started.

System action

Processing continues.

Programmer response

No change is required. The specified accelerator server must be defined to Db2 before it is used during the execution of the package.

DSNT331I *csect-name* DATABASE *name* AND ANY SPACE IT CONTAINS CANNOT BE STOPPED. IT IS THE ACTIVE COMMUNICATIONS DATABASE

Explanation

The database specified in the message cannot be stopped because it is the active communications database. In addition, spaces within the active communications database cannot be stopped.

System action

Nothing is stopped.

Operator response

If the database or any space within it must be stopped, you must stop the distributed data facility (STOP DDF). In a Db2 data sharing environment, you must stop the distributed data facility on all members of the Db2 data sharing group.

DSNT332I TABLESPACES AND INDEXSPACES ARE UNAVAILABLE BECAUSE DATABASE name IS STOPPED

Explanation

The database 'name' is currently marked as stopped. Consequently, its table spaces and index spaces are unavailable even though they may have been started.

DSNT336I ***bind-type*** **FOR PACKAGE = *package-name* FAILED BECAUSE OF THE USE OF *keyword*. ONE OR MORE STATEMENTS WERE NOT SUCCESSFULLY PROCESSED.**

Explanation

The subcommand failed because APCOMPARE or APREUSE was not successfully processed for remote BIND or REBIND PACKAGE. This message is issued for remote BIND or REBIND only. One of the following conditions occurred:

- APCOMPARE(ERROR) was specified and the use of APCOMPARE resulted in some statements where comparison is not successful or comparison could not be performed.
- APREUSE(ERROR) was specified and the use of APREUSE resulted in some statements where APREUSE is either not successful or partially successful, or APREUSE could not be performed, or APREUSE was suppressed by other hints.

bind-type
The type of bind command: BIND or REBIND

package-name
The name of the package, in the format *location-id.collection-id.package-id*.

keyword
APCOMPARE or APREUSE.

System action

The package is not rebound.

User response

Run the BIND or REBIND command again, and specify the EXPLAIN(ONLY) option to see the detailed results of APCOMPARE or APREUSE in the EXPLAIN tables.

Related tasks

Reusing and comparing access paths at bind and rebind (Db2 Performance)

Related reference

APCOMPARE bind option (Db2 Commands)
APREUSE bind option (Db2 Commands)
EXPLAIN bind option (Db2 Commands)

DSNT337I ***bind-type*** **WARNING FOR PACKAGE = *package-name*, THE USE OF *keyword* RESULTED IN UNSUCCESSFUL COMPLETION FOR ONE OR MORE STATEMENTS.**

Explanation

The subcommand finished successfully. However, APCOMPARE or APREUSE might not be completely successful. This warning message is issued for remote BIND or REBIND only. One of the following conditions occurred:

- APCOMPARE(WARN) was specified but the use of APCOMPARE resulted in some statements where comparison is not successful or comparison could not be performed.
- APREUSE(WARN) was specified and the use of APREUSE resulted in some statements where APREUSE is either not successful or partially successful, or APREUSE could not be performed, or APREUSE was suppressed by other hints.

bind-type
The type of bind command: BIND or REBIND

package-name
The name of the package, in the format *location-id.collection-id.package-id*.

keyword
APCOMPARE or APREUSE.

System action

The package is rebound.

User response

For detailed results of APREUSE or APCOMPARE, check the EXPLAIN tables

Related tasks

Reusing and comparing access paths at bind and rebind (Db2 Performance)

Related reference

APCOMPARE bind option (Db2 Commands)
APREUSE bind option (Db2 Commands)
EXPLAIN bind option (Db2 Commands)

DSNT338I **WARNING FOR PACKAGE = *package-name*, AN INVALID CHARACTER IN THE CCSID *source-ccsid* EXISTS IN THE STATIC STATEMENT SECTION *section-number***

Explanation

An invalid character was detected during the processing of the BIND subcommand. The invalid character was replaced with a substitution character in CCSID 1208.

package-name
The package that contains the invalid character.

source-ccsid
The CCSID that resulted in the invalid character.

section-number
The section number of the statement that contains the invalid character.

System action

Bind processing continues.

Operator response

Notify the system programmer.

System programmer response

Correct the identified invalid character in the package specified and resubmit the BIND.

DSNT350I **-luw-id ACCESSING DATA FOR location**

Explanation

This message follows message DSNT394I or DSNT396I for each thread reported that is participating in distributed data access (database access thread). This additional line reports the distributed identification as follows:

luw-id=token
The logical-unit-of-work identifier (LUW-ID) is a unique identifier that is assigned to the thread followed by an '=' sign and a token. The token can be used in place of luw-id in any Db2 command that accepts luw-id as input.

location
The LOCATION name assigned to the requesting site.

The message number and subsystem recognition character are not included in this message.

DSNT352I **AGENT TOKEN *agent token***

Explanation

This message is part of the output from the DISPLAY DATABASE command, which is described in message "DSNT361I" on page 527.

DSNT358I ***csect_name* INVALID PARTITION SPECIFICATION FOR OBJECT *object-name***

Explanation

Specification of the PART keyword in a DISPLAY DATABASE command is invalid.

The PART keyword is invalid if it is specified for:

- A nonpartitioned table space
- A nonpartitioned type 1 index
- A type 2 index not defined on a partitioned table space

The object *object-name* can be either a table space or an index space.

No action for this table space or index space is performed by the DISPLAY DATABASE command. Any other valid table space or index space specified is processed by the command.

System action

The command is not processed for the table space or index space in question. All other valid table spaces or index spaces specified in the command are processed.

User response

Resubmit the command for the nonpartitioned table space or index space without using the PART keyword.

Problem determination

SYSIBM.SYSTABLESPACE indicates whether a table space is partitioned. SYSIBM.SYSINDEXSPACE indicates whether an index space is partitioned and whether the index space is a type 1 or a type 2 index. Type 2 nonpartitioned indexes can be displayed at the logical partition level; type 1 indexes cannot.

Severity

8 (error)

DSNT359I ***csect_name* INVALID PARTITION NUMBER SPECIFIED - *part-num* FOR OBJECT *object-name***

Explanation

An invalid partition number was specified in the PART keyword for a DISPLAY DATABASE command.

Partition number *part-num* is invalid for the object *object-name*.

System action

The part number is ignored. All other valid partitions specified are processed.

User response

Determine the correct partition specification for the table space or index that was the subject of the specified command and resubmit the command.

Problem determination

SYSIBM.SYSTABLESPACE in the Db2 catalog indicates the correct range of partition numbers for the table space. SYSIBM.SYSINDEXSPACE in the Db2 catalog indicates whether an index space is partitioned and whether the index space is a type 1 or a type 2 index. The PART keyword can be used to display the status of logical partitions of type 2 indexes but not type 1 indexes.

Severity

8 (error)

DSNT360I **********

Explanation

This message consists of 35 asterisks that are part of the output from the DISPLAY DATABASE or DISPLAY BLOCKERS command. These commands are described in the messages "DSNT361I" on page 527 and "DSNT369I" on page 536.

DSNT361I *DISPLAY DATABASE SUMMARY* *report-type-list*

Explanation

This message displays output from the DISPLAY DATABASE command. The output consists of information about the requested set of databases, table spaces, and index spaces.

The output from this command has the following general structure. In your output, some of these lines might be included more than once and some might not be included at all. Which lines are included depends on the situation, as noted in the descriptions of the variables in this output.

```
DSNT360I -
**********************************************
***********
DSNT361I - *  DISPLAY DATABASE SUMMARY
           *    report-type-list
DSNT360I -
**********************************************
***********
DSNT362I -     DATABASE = database-name  STATUS
= database-status
               DBD LENGTH = dbd-length
DSNT363I - PHYSICAL ERROR PAGE RANGE FOR DATA
SET data-set-name  LOW=lowphy, HIGH=hiphy
DSNT397I -
```

After line DSNT397I, information about the requested table spaces, index spaces, and partitions is displayed. The general format depends on which options are specified in the DISPLAY DATABASE command, as follows.

OVERVIEW option

When the OVERVIEW option is specified on the DISPLAY DATABASE command, the output that follows line DSNT397I has the following general format:

```
NAME     TYPE PARTS
-------- ---- -----
space    type parts
space    type parts
space    type parts
```

CLAIMERS option

When the CLAIMERS option is specified on the DISPLAY DATABASE command, the output that follows line DSNT397I has the following general format:

```
NAME     TYPE PART  STATUS
CONNID   CORRID       CLAIMINFO
-------- ---- ----- ----------------
-------- ------------ --------
space    type part  status            conn-
id  corr-id      claims
----                status-2          pages-2
     -                   MEMBER NAME member-
name
space    type part  status            conn-
id  corr-id      claims
     -                   MEMBER NAME member-
name
space    type part  status            conn-
id  corr-id      claims
DSNT352I - AGENT TOKEN agent token
```

USE option

When the USE option is specified on the DISPLAY DATABASE command, the output that follows line DSNT397I has the following general format:

```
NAME     TYPE PART  STATUS
CONNID   CORRID       USERID
-------- ---- ----- ----------------
-------- ------------ --------
space    type part  status            conn-
id  corr-id      user-id
----                status-2          pages-2
     -                   MEMBER NAME member-
name
space    type part  status            conn-
id  corr-id      user-id
     -                   MEMBER NAME member-
name
space    type part  status            conn-
id  corr-id      user-id
```

LOCKS option

When the LOCKS option is specified on the DISPLAY DATABASE command, the output that follows line DSNT397I has the following general format:

```
NAME     TYPE PART  STATUS
CONNID   CORRID       LOCKINFO
-------- ---- ----- ----------------
-------- ------------ ---------
space    type part  status            conn-
id  corr-id      lock
----                status-2          pages-2
     -                   MEMBER NAME member-
name
space    type part  status            conn-
```

```
id  corr-id      lock
    -                    MEMBER NAME member-
name
space    type part  status            conn-
id  corr-id      lock
DSNT352I - AGENT TOKEN agent token
```

LPL option
When the LPL option is specified on the DISPLAY DATABASE command, the output that follows line DSNT397I has the following general format:

```
NAME     TYPE PART  STATUS            LPL
PAGES
-------- ---- ----- ----------------
-----------------
space    type part  status            LPL-
pages
----                status-2          pages-2
space    type part  status            LPL-
pages
space    type part  status            LPL-
pages
```

When WEPR, LOCKS, LPL, CLAIMERS, and USE are omitted
When the DISPLAY DATABASE command is issued without the WEPR, LOCKS, LPL, CLAIMERS, and USE options, the output that follows line DSNT397I has the following general format:

```
NAME     TYPE PART  STATUS
PHYERRLO PHYERRHI CATALOG  PIECE
-------- ---- ----- ----------------
-------- -------- -------- -----
space    type part  status            lo-
page  hi-page  cat-name piece
----                status-2          pages-2
space    type part  status            lo-
page  hi-page  cat-name piece
     -THRU part
space    type part  status            lo-
page  hi-page  cat-name piece
```

The DISPLAY DATABASE output ends with the following lines:

```
******* DISPLAY OF DATABASE name action
**************************
DSN9022I - DSNTDDIS 'DISPLAY DATABASE' NORMAL
COMPLETION
```

"Error messages" on page 535 might also be included in your output if a problem occurred.

report-type-list
The options that were specified on the DISPLAY DATABASE command. Each option is delimited by a space. Possible values include one or more of the following options:

ACTIVE
The output includes all allocated databases.

GLOBAL
The output includes all requested database information.

report-type-list is GLOBAL if the DISPLAY DATABASE command does not include the ACTIVE, DISABLED, and RESTRICT options.

LOCKS
The output includes all connection identifiers and correlation identifiers of all applications that are holding, retaining, or waiting for locks on the specified table spaces or index spaces.

RESTRICT
The output includes all databases with restricted usage. Databases in RO and started UT mode are listed.

USE
The output includes the connection identifiers and correlation identifiers of all allocated applications.

CLAIMERS
The output includes the connection identifiers and correlation identifiers of all applications that are holding claims on the specified database.

LPL
The output includes the page number ranges of the pages that are included in the logical page list for the table space or index space.

OVERVIEW
The output includes all table spaces and index spaces that are contained within the databases that are specified.

database-name
The name of the database.

database- status
The status of the database. The value can be one or more of the following strings delimited by a comma. The maximum length of the string is 18 characters.

RO
The database is started for read activity only.

RW
The database is started for read and write activity.

STOP
The database is stopped.

STOPP
A stop operation for this database is in progress, is pending or has failed.

If the object seems to be in a persistent STOPP status, check whether the stop operation is still in progress. You can check this progress by looking at message DSNI003I or the output from the DISPLAY THREAD command with the TYPE(SYSTEM) option.

- Message DSNI003I lists objects that could not be stopped.
- In the DISPLAY THREAD output, look for message DSNV501I with STOP DATABASE listed as the command that is executing. If you see one of these messages, the STOP DATABASE command is still in progress for the thread that is identified in DSNV402I.

If the STOP operation timed out or failed, resolve the error by using the START DATABASE command.

Related information:

-DISPLAY THREAD (Db2) (Db2 Commands)
-START DATABASE (Db2) (Db2 Commands)
"DSNI003I" on page 221

UT
The database is started for utility processing only.

UTRO
A utility that allows only RO access is in process on the database. If the utility was canceled before the object was drained, the object can allow SQL access, because the object was not altered by the utility.

UTRW
A utility that allows RW access is in process on the database.

UTUT
A utility that allows only UT access is in process on the database. If the utility was canceled before the object was drained, the object can allow SQL access, because the object was not altered by the utility.

dbd-length
The length of the database descriptor (DBD) in bytes.

DSNT363I - PHYSICAL ERROR PAGE RANGE FOR DATA SET *data-set-name* LOW=*lowphy*, HIGH=*hiphy*

This line lists any physical I/O errors on a data set. This information is displayed if such errors exist and the SPACENAM option was specified on the DISPLAY DATABASE command.

This message refers to physical pages in a data set that supports a page set. *Page sets* (table spaces or index spaces) are made up of supporting data sets. *Physical pages* are pages in supporting data sets. Physical pages are numbered from the beginning of the particular data set in which they reside.

data-set-name

The name of the data set with errors.

lowphy
The first page number in the range of physical pages that were being read when the I/O errors occurred. These physical pages are within the identified data set.

hiphy
The last page number in the range of physical pages that were being read when the I/O errors occurred.

space
The table space name, index space name, or table object ID (OBID).

The line that begins with *space* describes the status of a table space or index space in the specified database. (The database is listed in the preceding DSNT362I line.) This line is repeated as many times as needed to satisfy the DISPLAY DATABASE request.

The line that begins with *space*, the header line that precedes it, and the DISPLAY OF DATABASE line are always produced with a multiple line WTO and are never interrupted.

type
The type of object. *type* can have one of the following values:

TS
Table space

IX
Index space

LS
LOB table space

TB
Table

XS
XML table space

If the object is involved in cloning, *type* is appended with a B (for a base object) or a C (for a clone object) and a data set instance number. For example, a base object that is involved with cloning has B2 appended to the type indicator if it is represented by an instance number 2 data set. A base object that is no longer involved with cloning has no suffix.

Look at the CLONE column in the SYSIBM.SYSTABLESPACE catalog table to determine whether a table space and its objects are involved in cloning. A value of Y in the CLONE column indicates that cloning is active. The value in the INSTANCE column indicates the data set instance number for the current base objects.

Related information:

SYSTABLESPACE catalog table (Db2 SQL)

parts
The number of partitions in the table space, index space, LOB table space, or XML table space. This value is blank for a simple table space, simple index space, or segmented table space.

part
The partition number. This value is blank for a nonpartitioned table space or an index on a nonpartitioned table space. For nonpartitioned secondary indexes, this value is the logical partition number preceded by the character L (for example, L0001). For data-partitioned secondary indexes, this value is preceded by the character D (for example, D0001).

If this column is blank or contains L* for a partitioned object, the data that is reported in that line of output applies to the entire table space or index object.

status
The status of the table space or index space. Possible values are blank, or one or more of the following values, delimited by commas. The maximum length of the string is 17 characters.

ACHKP
The table space is in auxiliary CHECK-pending status. See Auxiliary CHECK-pending status (Db2 Utilities).

ARBDP
The index space is in advisory REBUILD-pending status. This status is set when indexes with varying length columns are changed from VARYING NO to VARYING YES.

AREO*
The table space is in advisory REORG-pending status. See REORG-pending status (Db2 Utilities).

AREST
The table space, index space, or physical partition of a table space or index space is in an advisory restart-pending status. If backout processing for the object is not already in progress, start backout processing. Either issue the RECOVER POSTPONED command or restart the Db2 subsystem with the subsystem parameter LBACKOUT set to AUTO.See LIMIT BACKOUT field (LBACKOUT subsystem parameter) (Db2 Installation and Migration).

AUXW
The table space is in auxiliary warning status. See Auxiliary warning status (Db2 Utilities).

CHKP
The table space or partition within a table space is in CHECK-pending status. See CHECK-pending status (Db2 Utilities).

COPY
The table space or partition within a table space is in COPY-pending status. See COPY-pending status (Db2 Utilities).

DBETE
Either one of the following situations exist:

- The table space, partition within a table space, index space, index partition, or logical index partition is in DBETE status. The error occurred when the DBET states were being modified during log apply or must-complete processing. This condition prohibited Db2 from successfully updating the DBET states.
- Db2 encountered an unexpected page set access error during restart, unrelated to processing a DBET exception state.

See DBETE status (Db2 Utilities).

GRECP
The table space, table space partition, index space, or index space partition is in group buffer pool RECOVER-pending status. See Group buffer pool RECOVER-pending status (Db2 Utilities) and Data sharing status descriptions (Db2 Data Sharing Planning and Administration).

This status value is valid only on spaces. It does not apply to databases.

ICOPY
The object is in informational COPY-pending status. See Data sharing status descriptions (Db2 Data Sharing Planning and Administration) and Informational COPY-pending status (Db2 Utilities).

LPL
The object has pages or ranges of pages that are unavailable because of logical or physical damage. See Removing pages from the logical page list (Db2 Administration Guide).

LSTOP
The logical partition is stopped.

PRO
The table space partition is in Persistent Read Only restricted status. See PRO restricted status (Db2 Utilities)..

PSRBD
The index space is in page set REBUILD-pending status. See REBUILD-pending status (Db2 Utilities).

RBDP
The index space, index partition, or logical index partition is in REBUILD-pending status. See REBUILD-pending status (Db2 Utilities).

For logical partitions, the RBDP status can be displayed as RBDP*.

RBDP*
The object is in REBUILD-pending status. See REBUILD-pending status (Db2 Utilities)..

The entire index is inaccessible to SQL applications. However, only the logical partition must be rebuilt.

RECP
The table space, table space partition, index space, index partition, or logical index partition is in RECOVER-pending status. See RECOVER-pending status (Db2 Utilities).

REFP
The table space, table space partition, index space, or index space partition is in REFRESH-pending status. See REFRESH-pending status (Db2 Utilities).

REORP
The table space or table space partition is in REORG-pending status. See REORG-pending status (Db2 Utilities).

RESTP
The object is in the restart-pending status. See Restart-pending status (Db2 Utilities).

RO
The table space, table space partition, index space, or index space partition is started for read-only activity.

RW
The table space, table space partition, index space, or index space partition is started for read and write activity.

STOP
The able space, table space partition, index space, or index space partition is stopped.

STOPE
The table space or index space was implicitly stopped because the log RBA in a page had a problem. Message DSNT500I or DSNT501I is issued when the error is detected to indicate the inconsistency. See "DSNT500I" on page 568 or "DSNT501I" on page 568 .

STOPP
A stop is pending for the database, table space, table space partition, index space, or index space partition.

UT
The table space, table space partition, index space, or index space partition is started for utility processing only.

UTRO
A utility that allows only RO access is in process on the table space, table space partition, index space, or index space partition.

UTRW
A utility that allows RW access is in process on the table space, table space partition, index space, or index space partition.

UTUT
A utility that allows only UT access is in process on the table space, table space partition, index space, or index space partition.

WEPR
This object has pages or ranges of pages that are unavailable because of physical damage. To reset this status, use either the RECOVER utility with the ERROR RANGE option or the LOAD utility with the REPLACE option.

If the status for a nonpartitioned index is blank, the status information is displayed at the logical partition level. If *type* is TB, status is blank.

In the final summary line for partitioned objects where *space* is either blank or L*, *status* can be only blank, DBETE or DBETE,RECP.

status-2
More statuses for the listed object. *status-2* is displayed if all of the status information cannot fit on the preceding line.

THRU *part*
This line indicates that a range of partitions share the same *status* information.

part
The last partition in a range of partitions that share the same status information as the partition listed in the preceding line.

This line can be displayed only when the preceding line does not contain information for the following values:

- *lo-page*
- *hi-page*
- *cat-name*
- *piece*

conn-id
A connection identifier for the thread. *conn-id* can have one of the following values:

BATCH
The thread is from a batch region.

TSO
The thread is from a TSO terminal.

UTILITY
The thread is from a utility.

IMS identifier
The thread is from an IMS terminal.

CICS identifier
The thread is from a CICS terminal.

CONSOLE
The thread is from the console.

the connection name of the thread at the requesting location
The thread is a distributed database access thread that uses system-directed access and or application-directed access from a Version 3 or later Db2 requester.

SERVER
The thread is a distributed database access thread that uses application-directed access from a non-Db2 requester or from a Db2 Version 2 Release 3 requester.

If the DISPLAY DATABASE command included the LOCKS option and the displayed lock is a P-lock or a retained lock (either L-lock or P-lock), a *conn-id* value is not displayed. For page set P-locks, the Db2 member name is used to identify the lock.

corr-id
A correlation identifier of the thread that is associated with the space name. *corr-id* can have one of the following values:

job name
The JCL job name. This value is displayed if the thread is from a batch region.

TSO logon identifier
The TSO logon user ID. This value is displayed if the thread is from a TSO terminal.

pst#.psbname
This value is displayed if the thread is from an IMS terminal.

entry ID.thread number.tran id
This value is displayed if the thread is from a CICS terminal. See Db2 thread identification (CICS Transaction Server for z/OS).

CONSOLE
This value is displayed if the thread is from the console.

0*nn*
This value is displayed if the thread is for a system agent. *nn* is a number.

028.DBAA*nn*
This value is displayed if the thread is a distributed database access thread that is being created. *nn* ranges from 01 to 99. This value indicates that the database access agent (DBAA) is in its connection processing. This processing consists of establishing the DBAA thread and validating and verifying the user's ID.

All RACF requests are serialized on a single Db2 RACF service task, which might increase the validation time when multiple DBAAs are being created concurrently.

the correlation ID of the thread at the requesting location.
This value is displayed for an existing distributed database access thread that uses system-directed access or application-direct access from a Db2 requester.

extnam
The first 12 characters in the DDM external name (EXTNAM) parameter of the DDM EXCSAT command that is received as part of the SQL CONNECT. This value is displayed for an existing distributed database access thread that uses application-directed access from a requestor that is not Db2.

If the DISPLAY DATABASE command included the LOCKS option and the displayed lock is a P-lock or a retained lock (either L-lock or P-lock), a *corr-id* value is not displayed. For page set P-locks, the Db2 member name is used to identify the lock.

claims
The type and duration of currently held claims. The claim consists of a claim class descriptor and a claim duration descriptor.

The claim class descriptor has one of the following values:

CS
Cursor stability claim class

RR
Repeatable-read claim class

WR
Write claim class

The claim duration descriptor describes the duration of the claims and has one of the following values:

A
The claim is held until deallocation.

C
The claim is held until the next commit point.

H
The claim is held across commit.

agent token
Holders or claimers. This information is displayed if the LOCKS option or the CLAIMERS option was specified on the DISPLAY DATABASE command and the agent information is available.

You can cancel the lock holder or claimer by using the CANCEL THREAD command. Alternatively, you can gather more information about the holder or claimer by using the DISPLAY THREAD command.

user-id
The user ID, which can be one of the following values:

TSO logon identifier
The TSO logon user ID. This value is displayed if the thread is from a TSO terminal.

AXBUSER
This value is displayed if the thread is from an IMS message-driven region and RACF is used.

sign-on ID* or *LTERM
The user ID that was used to sign on the terminal that is attached to IMS or the logical terminal (LTERM) value. This value is displayed if the thread is from an IMS message-drive region.

PSB name
The program specification block (PSB) name. This value is displayed if the thread is from an IMS nonmessage-driven region and RACF is not used.

user-id*, *term id*, or *tran id
The user ID, terminal ID, transaction ID, or other ID, as specified in the resource control table (RCT) if the thread is from CICS.

MEMBER NAME *member-name*

This line is displayed for each thread in a data sharing environment.

member-name
The name of the Db2 member that is accessing this object.

If the characters (CO) follow the member name, this member is the castout owner for the page set or partition. The castout owner for a page set or partition is the Db2 member that is responsible for doing all of the castout I/O for that page set or partition.

lock
A description of the following types of locks and the duration of the locks:

- Transaction locks (also called L-locks) are identified by the connection ID and correlation ID of their corresponding agents.

  Multiple locks that are held by an agent are listed on multiple lines of the report followed by any locks on which the agent is waiting.
- Physical locks (P-locks) and retained locks are identified by their Db2 data sharing member names.

  Multiple P-locks or retained locks that are held by a Db2 data sharing member are listed on multiple lines of the report. The output then lists any locks on which the member is waiting.

lock consists of the following information:

```
lock status-lock state,lock type,lock
duration
```

lock status
The status of the lock, which can be one of the following values:

H
The lock is held by the agent or the Db2 member.

W
The agent or the member is waiting for the lock.

R
The lock is retained.

lock state
The mode of the lock as follows:

- For L-locks and drain locks, *lock state* has one of the following values:

  IS
  A lock with read intentions.

  IX
  A lock with update intentions.

  S
  A lock with read-only capability.

  U
  A lock with update capability.

  SIX
  A table space or table lock with a protocol that does not lock a page while reading it, but does lock the page with update intention while updating it.

  X
  An exclusive lock.
- For L-locks on LOB table spaces, *lock state* has one of the following values:

  IS
  A lock with intent to reserve space within the LOB table space

  IX
  A lock with intent to insert LOBs in the LOB table space.

  S
  A lock that reserves space within the LOB table space.

SIX
A lock that allows the owner to read and update LOBs.

X
An exclusive lock.

- For P-locks, *lock state* has one of the following values:

  IS
  This Db2 member has R/O interest. The page set or partition is group buffer pool (GBP) dependent.

  IX
  This Db2 member has R/W interest. The page set or partition is GBP-dependent.

  S
  This Db2 member has R/O interest. The page set or partition is not GBP-dependent.

  SIX
  This Db2 member has R/W interest. The page set or partition is GBP-dependent.

  NSU
  This Db2 member has R/W interest. The page set or partition is GBP-dependent.

  X
  This Db2 member has R/W interest. The page set or partition is not GBP-dependent.

lock type
lock type describes the type of locking and has one of the following values:

S
A table space L-lock

T
A table L-lock

C
A cursor-stability read drain lock

R
A repeatable-read drain lock

W
A write drain lock

P
A partition L-lock

PP
A page set or partition P-lock

lock duration
lock duration describes the duration of the lock as follows:

- If *lock status* has a value of H, *lock duration* has one of the following values:

  A
  The lock is freed at deallocation.

  C
  The lock is freed at commit.

  H
  The lock is freed when all cursors are closed.

  M
  The lock is freed by the system.

  P
  The lock is freed when the plan is complete.

  I
  The lock is a page set or partition P-lock. It is released when the page set or partition data set is closed.

- If the *lock status* has a value of W, *lock duration* is a two-digit number that indicates the position of the waiter in the lock waiting queue for the local Db2 system.

  After the agent acquires the lock, the *lock status* value becomes H, and the *lock duration* value becomes one of the lock duration values that are listed for a lock status of H.

- For a P-lock, the lock is owned by the system, not the user, and its duration is not related to the duration of the locks that are owned by the user.
- Retained locks do not have a lock duration.

No explicit index space locks exist. However, all index spaces on tables are implicitly locked with transaction locks at the same level as the table spaces that contain those tables. P-locks are acquired by Db2 on index spaces and on table spaces.

LPL-pages
The pages in the specified *space* that are unavailable because of logical or physical damage.

pages-2
More pages that are in the logical page list (LPL) for the listed object. *pages-2* is displayed if the list of pages cannot fit on the preceding line.

LPL pages can be listed in one of the following two formats:

- Single pages, which are represented by the page number
- A range of pages, which are represented by the starting page number followed by a dash and the ending page number in the range

lo-page
A hexadecimal number that identifies the lowest page number that contains a physical I/O error.

This value is displayed only if a data set for the specified table space or index space has physical I/O errors. Otherwise, if no physical I/O errors exist, this column is blank.

hi-page
A hexadecimal number that identifies the highest page number that contains an I/O error.

This value is displayed only if a data set for the specified table space or index space has physical I/O errors. Otherwise, if no physical I/O errors exist, this column is blank.

cat-name
The catalog that owns the data set with the I/O errors.

This value is displayed only if a data set for the specified table space or index space has physical I/O errors. Otherwise, if no physical I/O errors exist, this column is blank.

piece
An integer number that identifies the piece within the table space or index space with the error.

This value is displayed only if a data set for the specified table space or index space has physical I/O errors. Otherwise, if no physical I/O errors exist, this column is blank.

You can use the piece number to construct the name of the data set for the space that contains the physical error as follows:

```
cat-name.DSNDBC.database-name.
space-name.I0001.Axxxx
```

Where *xxxx* is the piece number plus one and database-name is the name that is displayed in the preceding DSNT362I message. If the table space or index space is partitioned, the partition number is equal to the piece number plus one.

DISPLAY OF DATABASE *name action*
This line indicates the end of the DISPLAY DATABASE output.

name
The name of the database.

action
An indication of whether the output is complete. *action* can have one of the following values:

CONTINUES
The remaining table space and index space names within this database are continued to a new display.

TERMINATED
The remaining table space and index space names within this database are terminated.

ENDS
The display for this database is complete.

Error messages

The following messages in the DISPLAY DATABASE output indicate that an error occurred:

DSNT399I INVALID *space-name*
See "DSNT399I" on page 547.

DSNT602I NO SPACES FOUND
See "DSNT602I" on page 584.

DSNT603I *spacetype name* NOT *type*
See "DSNT603I" on page 585.

DSNT604I NO INFORMATION AVAILABLE
See "DSNT604I" on page 585.

System action

Processing continues.

User response

No action is required.

Related reference
-DISPLAY DATABASE (Db2) (Db2 Commands)
Advisory or restrictive states (Db2 Utilities)

DSNT362I **DATABASE = *database-name* STATUS = *status* DBD LENGTH = *dbd-length***

Explanation

This message is part of the output from the DISPLAY DATABASE command, which is described in message "DSNT361I" on page 527.

DSNT363I **PHYSICAL ERROR PAGE RANGE FOR DATA SET *data-set-name* LOW=*lowphy*, HIGH=*hiphy***

Explanation

This message is part of the output from the DISPLAY DATABASE command, which is described in message "DSNT361I" on page 527.

DSNT364I ***csect-name* KEYWORD *ONLY* IS USED INCORRECTLY**

Explanation

Keyword *ONLY* is used incorrectly in the DISPLAY DATABASE command. When the SPACENAM keyword is specified, keyword *ONLY* is valid only if one of the following keywords is also used:

- LOCKS
- LPL
- CLAIMERS
- WEPR
- USE

System action

The DISPLAY DATABASE command is not processed.

User response

Add one of the keywords mentioned above in the explanation to the DISPLAY DATABASE command and issue the command again.

DSNT365I NO DATABASES FOUND

Explanation

This message is produced when a DISPLAY DB(name) is entered and no databases were found to satisfy the request.

System action

The process continues normally.

DSNT366I DATABASE name NOT type

Explanation

A database listed in the DISPLAY DB(...) is not of the correct type. The variables are as follows:

name
The name of the object.

type
The type of request specified: ACTIVE, RESTRICTED, ACTIVE OR RESTRICTED

Note that either DSNT301I or DSNT302I is produced if no object is found and the keywords ACTIVE and RESTRICT are omitted.

System action

Processing continues normally.

DSNT367I NO INFORMATION AVAILABLE

Explanation

This message indicated there is no LOCK, USE, LPL, WEPR or CLAIMER information available when DISPLAY DB(...) SPACENAM(...) ONLY is entered with the keywords LOCKS, USE, LPL, WEPR or CLAIMERS.

System action

The process continues normally.

DSNT368I *csect-name* MORE THAN ONE MUTUALLY EXCLUSIVE KEYWORD WAS SPECIFIED IN THE DISPLAY DATABASE COMMAND.

Explanation

The keywords, LOCKS, LPL, CLAIMERS, WEPR and USE are mutually exclusive. Only one should be specified in a DISPLAY DATABASE command. The precedence order for which keyword takes precedence over the others is:

1. LPL
2. CLAIMERS
3. LOCKS
4. USE
5. WEPR

System action

The DISPLAY DATABASE command is processed with this warning message.

User response

Remove keywords from DISPLAY DATABASE command until only one of these mutually exclusive keywords is specified.

DSNT369I *DISPLAY BLOCKERS SUMMARY REPORT* *report-time*

Explanation

This message displays output from the DISPLAY BLOCKERS command. The output consists of information about the specified set of databases.

The output from this command has the following general structure. In your output, some of these lines might be included more than once and some might not be included at all. Which lines are included depends on the output being displayed.

The output begins with the following lines:

```
DSNT360I -
**********************************************
***********
DSNT369I - *  DISPLAY BLOCKERS SUMMARY REPORT
```

```
          *  report-time
DSNT360I -
*********************************************
***********
DSNT397I -
```

After line DSNT397I, information that is related to the requested databases is displayed.

When the DISPLAY BLOCKERS command is issued, the output that follows line DSNT397I has the following general format. Each character string is displayed with a maximum length of eight characters.

```
T    LT         DBNAME  DBID  NAME   OBID  AGE
(SHORT)   TOKEN  MEMBER
---- ---------  ------  ----  ----   ----
-----------   -----  ------
type lock-type  dbname  dbid  name(1)
obid  age (short)(2)  token  member
```

1. An object name or package name ending with an asterisk (*) indicates that the full name exceeds eight characters in length.
2. The AGE value is displayed in a shortened format that consists of the two most significant duration values. For example, if a lock has been held for 3 days, 17 hours, 23 minutes, 19 seconds, and 12.49038 microseconds, the AGE value that is displayed is 3 D 17 H. The locks are still ordered by AGE value from longest to shortest, even if multiple locks have the same shortened AGE value.

Without the DETAIL option, the command displays a maximum of 5,000 locks and claims.

DETAIL option

When you specify the DETAIL option, the output begins with the following lines instead:

```
DSNT360I -
*********************************************
**************
DSNT369I - *  DISPLAY BLOCKERS DETAILED
REPORT
          *  report-time
DSNT360I -
*********************************************
**************
DSNT397I -
```

The output that follows line DSNT397I includes the following additional information. If a value is blank or consists of binary zeroes, then the field is not displayed in the report.

```
                  CONNID: conn-id
                  CORRID: corr-id
                  AGE: age(1)
                  USERID: userid
                  LUWID: luw-identifier
                  OBJNAME: object-name(2)

                  PKGNAME: package-name(2)

                  STATE: state
                  DURATION: duration
                  PAGE/RID: page-or-rid
                  ACQUIRED: acquired
```

1. The entire AGE value is displayed with a maximum length of 27 bytes.
2. An object name or package name that exceeds eight characters in length is displayed in its entirety. Up to three lines of output might be required to display a full name. If more than one line is required, the name is enclosed in single quotation marks (').

With the DETAIL option, the command displays a maximum of 1,000 locks and claims.

The output ends with the following lines:

```
******* DISPLAY BLOCKERS ENDED
**********************
DSN9022I - DSNTDDIS 'DISPLAY BLOCKERS' NORMAL
COMPLETION
```

Error messages and informational messages might also be included in your output. If the number of locks or claims exceeds the maximum number that can be displayed, message DSNT306I is issued.

report-time
The date and time when the report was generated

type
The type of blocker held by the thread. *type* can have one of the following values:

L
Lock

C
Claim

I
Indicates that the row is for informational purposes.

E
Indicates that an error occurred.

lock type

The type of lock or claim. Locks can have one of the following values:

00
Page lock

01
Database lock

02
Page set lock

03
Data set lock (partition)

05
Index compression lock

06
Lock-specific partition

07
Page set or data set open

08
Utility I/O damage assessment

09
Page set piece locks

0A
Database exception table (DBET) entry locks

0D
Buffer manager (BM) SYSLGRNG recording lock or group buffer pool (GBP) conversion dependent lock

0E
Mass delete lock for table

10
Table lock for segmented table space

12
Package lock

18
Row lock

1F
Distributed data facility (DDF) communications database (CDB) P-lock

22
Resource limit facility (RLF) P-lock

27
DBET logical page list (LPL) or group buffer pool recovery pending (GRECP) locks

30
LOB lock

32
LPL recovery lock

36
Serialization lock for adding partitions

39
Load database definition (DBD) lock

3A
Compression dictionary build lock

3B
Compression dictionary load lock

41
Utility catalog access lock

Claims can have one of the following values:

20
WR claim

40
RR claim

60
RR, WR claim

80
CS claim

A0
CS, WR claim

dbname
The name of the database that contains the lock

dbid
The database identifier (DBID) for the database

name
The name of the object (table, index, or table space) that contains the lock

obid
The object identifier (OBID)

age (short)* and *age
The elapsed time between the beginning of the thread and the execution of the DISPLAY BLOCKERS command, with the following abbreviated keywords:

D
Days

H
Hours

M
Minutes

S
Seconds. Microseconds are represented by up to six decimal digits.

token
The token that is assigned to the thread

member
The Db2 member name

conn-id
A connection identifier for the thread. *conn-id* can have one of the following values:

BATCH
The thread is from a batch region.

TSO
The thread is from a TSO terminal.

UTILITY
The thread is from a utility.

IMS identifier
The thread is from an IMS terminal.

CICS identifier
The thread is from a CICS terminal.

CONSOLE
The thread is from the console.

The connection name of the thread at the requesting location
The thread is a distributed database access thread that uses system-directed access and or application-directed access from a Version 3 or later Db2 requester.

SERVER
The thread is a distributed database access thread that uses application-directed access from a non-Db2 requester.

corr-id
A correlation identifier of the thread that is associated with the space name. *corr-id* can have one of the following values:

job name
The JCL job name. This value is displayed if the thread is from a batch region.

TSO logon identifier
The TSO logon user ID. This value is displayed if the thread is from a TSO terminal.

pst#.psbname
This value is displayed if the thread is from an IMS terminal.

entry ID.thread number.tran id
This value is displayed if the thread is from a CICS terminal. See Db2 thread identification (CICS Transaction Server for z/OS).

CONSOLE
This value is displayed if the thread is from the console.

0*nn*
This value is displayed if the thread is for a system agent. *nn* is a number.

028.DBAA*nn*
This value is displayed if the thread is a distributed database access thread that is being created. *nn* ranges from 01 to 99. This value indicates that the database access agent (DBAA) is in its connection processing. This processing consists of establishing the DBAA thread and validating and verifying the user's ID.

All RACF requests are serialized on a single Db2 RACF service task, which might increase the validation time when multiple DBAAs are being created concurrently.

The correlation ID of the thread at the requesting location
This value is displayed for an existing distributed database access thread that uses system-directed access or application-direct access from a Db2 requester.

extnam
The first 12 characters in the DDM external name (EXTNAM) parameter of the DDM EXCSAT command that is received as part of the SQL CONNECT. This value is displayed for an existing distributed database access thread that uses application-directed access from a requestor that is not Db2.

user-id
The user ID, which can have one of the following values:

TSO logon identifier
The TSO logon user ID. This value is displayed if the thread is from a TSO terminal.

AXBUSER
This value is displayed if the thread is from an IMS message-driven region and RACF is used.

sign-on ID* or *LTERM
The user ID that was used to sign on the terminal that is attached to IMS or the logical terminal (LTERM) value. This value is displayed if the thread is from an IMS message-drive region.

PSB name
The program specification block (PSB) name. This value is displayed if the thread is from an IMS nonmessage-driven region and RACF is not used.

user-id*, *term id*, or *tran id
The user ID, terminal ID, transaction ID, or other ID, as specified in the resource control table (RCT) if the thread is from CICS.

luw-identifier
The logical-unit-of-work identifier of the thread. If the LUW-ID is an '*', the thread has no LUW-ID. If it is not an '*', the value is a logical-unit-of-work-id that is assigned to the thread followed by an '=' sign and a token value, which can be used in place of logical-unit-of-work-id in any Db2 command that accepts logical-unit-of-work-id as input.

info
The type and duration of currently held claims. The claim consists of a claim class descriptor and a claim duration descriptor.

The claim class descriptor has one of the following values:

CS
Cursor stability claim class

RR
Repeatable-read claim class

WR
Write claim class

The claim duration descriptor describes the duration of the claims and has one of the following values:

A
The claim is held until deallocation.

C
The claim is held until the next commit point.

H
The claim is held across commit.

acquired
The time when the lock or claim was acquired

System action

Processing continues.

User response

No action is required.

Related reference
-DISPLAY BLOCKERS (Db2) (Db2 Commands)

DSNT375I **PLAN=*plan-name1* WITH CORRELATION-ID=*correlation-id1* CONNECTION-ID=*connection-id1* LUW-ID=*luw-id1* THREAD-INFO=*thread-information1* IS DEADLOCKED WITH PLAN=*plan-name2* WITH CORRELATION-ID=*correlation-id2* CONNECTION-ID=*connection-id2* LUW-ID=*luw-id2* THREAD-INFO= *thread-information2* ON MEMBER *member-name***

Explanation

A plan has been denied an IRLM lock because of a detected deadlock.

plan-name1* and *plan-name2
The names of the executing plans.

plan-name1
The plan that was denied an IRLM lock.

plan-name2
One of the members of the deadlock.

Db2 does not attempt to identify all survivors of a deadlock or all participants in a deadlock in this message. This plan might be only one of several plans that are holding locks on the resource.

If multiple deadlocks are detected during the same deadlock-detection interval, the lock holder identified by *plan-name2* in one instance of this message might be selected to break a deadlock identified by a different instance of this message. The lock holder identified by *plan-name2* is not guaranteed to be a winner in all deadlocks in which it participates.

If you receive a system plan in this message for either *plan-name1* or *plan-name2*, see the information about system plans in message DSNT376I.

correlation-id1* and *correlation-id2
The correlation identifiers of the threads that are associated with, respectively, *plan-name1* and *plan-name2*. Correlation IDs that begin with values between 001 and 028 identify system agents.

connection-id1* and *connection-id2
The connection identifiers of, respectively, *plan-name1* and *plan-name2*.

luw-id1* and *luw-id2
The logical unit of work identifiers (LUWIDs) of, respectively, *plan-name1* and *plan-name2*.

*****
The thread does not have a LUWID.

luw-id=token
The logical unit of work ID and a five-digit token value. The token value can be used in any Db2 command that accepts a LUWID as input.

thread-information1* and *thread-information2
Information about the thread. The information is presented in a colon-delimited list that contains the following segments:

- The primary authorization ID that is associated with the thread.
- The name of the user's workstation.
- The ID of the user.
- The name of the application.
- The statement type for the previously executed statement: dynamic or static.
- The statement identifier for the previously executed statement, if available. The statement identifier can be used to identify the particular SQL statement. For static statements, the statement identifier correlates to the STMT_ID column in the SYSIBM.SYSPACKSTMT table. For dynamic statements, the statement identifier correlates to the STMT_ID column in the DSN_STATEMENT_CACHE_TABLE table. That statement might not have contributed to the current failure.
- The name of the role that is associated with the thread.
- The correlation token that can be used to correlate work at the remote system with work performed at the Db2 subsystem. The correlation token, if available, is enclosed in '<' and '>' characters, and contains three components, separated by periods:

- A 3 to 39 character IP address.
- A 1 to 8 character port address.
- A 12 character unique identifier.

An asterisk (*) in any segment indicates that the information is not available.

member-name
The name of the member of the Db2 subsystem on which the thread associated with *plan-id2* is executing.

System action

The SQLCA that corresponds to the correlation ID, connection ID, and LUWID for *plan-name1* contains the name of the resource that is involved in the deadlock and one of the following SQL codes: -904, -911 , -913, or -923.

Db2 can recover from a lock denial in some cases and can complete successfully. In such a case, the SQLCA is not filled in. One example is during setup of performance enhancements during bind time for execution time.

Problem determination

A Db2 IFCID 172 trace record contains the information needed to determine all participants in, and survivors of, a given deadlock.

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- IRLM trace output.

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Related concepts

Lock contention, suspension, timeout, and deadlock (Db2 Performance)

Related information

DSNT376I
PLAN=*plan-name1* WITH CORRELATION-ID=*correlation-id1* CONNECTION-ID=*connection-id1* LUW-ID=*luw-id1* THREAD-INFO=*thread-information1* IS TIMED OUT. ONE HOLDER OF THE RESOURCE IS PLAN=*plan-name2* WITH CORRELATION-ID=*correlation-id2* CONNECTION-ID=*connection-id2* LUW-ID=*luw-id2* THREAD-INFO= *thread-information2* ON MEMBER *member-name*

-904 (Db2 Codes)
-911 (Db2 Codes)
-913 (Db2 Codes)
-923 (Db2 Codes)

DSNT376I

PLAN=*plan-name1* WITH CORRELATION-ID=*correlation-id1* CONNECTION-ID=*connection-id1* LUW-ID=*luw-id1* THREAD-INFO=*thread-information1* IS TIMED OUT. ONE HOLDER OF THE RESOURCE IS PLAN=*plan-name2* WITH CORRELATION-ID=*correlation-id2* CONNECTION-ID=*connection-id2* LUW-ID=*luw-id2* THREAD-INFO= *thread-information2* ON MEMBER *member-name*

Explanation

A plan has been denied an IRLM lock because of a *timeout*. The maximum amount of time to wait for a locked resource was exceeded.

plan-name1* and *plan-name2
The names of the executing plans.

plan-name1
The plan that was denied an IRLM lock.

plan-name2
One of the plans holding a lock on the resource. The listed plan is not necessarily responsible for the timeout condition.

Several different system plans can appear in *plan-name1* and *plan-name2*. These system plans are not documented in SYSIBM.SYSPLAN. If you receive a system plan in this message, you are in contention with another user. If you are not doing an automatic rebind, message DSNT500I or DSNT501I might accompany this message and identify that resource. If you need additional information, see the SQLCA and any additional bind messages. (If you are performing an automatic rebind, the SQLCA is not available.) The system plans are:

- ACT
- BCT
- DISTSERV
- DSNBIND
- STARTCT
- DSNUTIL

correlation-id1* and *correlation-id2
The correlation identifiers of the threads that are associated with, respectively, *plan-name1* and

plan-name2. Correlation IDs that begin with values between 001 and 028 identify system agents.

connection-id1* and *connection-id2
The connection identifiers of, respectively, *plan-name1* and *plan-name2*. If the execution of the plan was switched by Db2 to a system agent, the connection identifier is the Db2 subsystem name.

luw-id1* and *luw-id2
The logical unit of work identifiers (LUWIDs) of, respectively, *plan-name1* and *plan-name2*.

*****
The thread does not have a LUWID.

luw-id=token
The logical unit of work ID and a six-digit token value. The token value can be used in any Db2 command that accepts a LUWID as input.

thread-information1* and *thread-information2
Information about the thread. The information is presented in a colon-delimited list that contains the following segments:

- The primary authorization ID that is associated with the thread.
- The name of the user's workstation.
- The ID of the user.
- The name of the application.
- The statement type for the previously executed statement: dynamic or static.
- The statement identifier for the previously executed statement, if available. The statement identifier can be used to identify the particular SQL statement. For static statements, the statement identifier correlates to the STMT_ID column in the SYSIBM.SYSPACKSTMT table. For dynamic statements, the statement identifier correlates to the STMT_ID column in the DSN_STATEMENT_CACHE_TABLE table. That statement might not have contributed to the current failure.
- The name of the role that is associated with the thread.
- The correlation token that can be used to correlate work at the remote system with work performed at the Db2 subsystem. The correlation token, if available, is enclosed in '<' and '>' characters, and contains three components, separated by periods:
  - A 3 to 39 character IP address.
  - A 1 to 8 character port address.
  - A 12 character unique identifier.

An asterisk (*) in any segment indicates that the information is not available.

member-name
The name of the member of the Db2 subsystem on which the thread associated with *plan-id2* is executing.

System action

Processing continues.

The SQLCA that corresponds to the correlation ID, connection ID, and LUWID for *plan-name1* contains the name of the resource that is involved in the timeout and one of the following SQL codes: -904 or -923.

Db2 can recover from a lock denial in some cases and can complete successfully. In such a case, the SQLCA is not filled in. One example is during setup of performance enhancements during bind time for execution time.

Operator response

Notify the system programmer.

System programmer response

To resolve the timeout, follow the instructions in Investigating and resolving timeout situations (Db2 Performance). See also SQLCODEs -911 and -913.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Listing of DSNZPARM module used.
- IRLM trace output.

Related concepts
Automatic rebinds (Db2 Application programming and SQL)
Related tasks
Programming applications for performance (Db2 Performance)
Related information
DSNT500I
csect-name RESOURCE UNAVAILABLE REASON *reason-code* TYPE *resource-type* NAME *resource-name*

DSNT501I

csect-name RESOURCE UNAVAILABLE

-904 (Db2 Codes)
-911 (Db2 Codes)
-913 (Db2 Codes)
-923 (Db2 Codes)

DSNT377I **PLAN=*plan-name* WITH CORRELATION-ID=*correlation-id* CONNECTION-ID=*connection-id* LUW-ID=*luw-id* THREAD-INFO=*thread-information* IS IN CONFLICT WITH AN INDOUBT THREAD ON MEMBER *member-name***

Explanation

A plan cannot gain an IRLM lock because a required resource is currently undergoing recovery.

plan-name
The name of the executing plan that is associated with this thread.

If you receive a system plan in this message, see the information about system plans in message DSNT376I.

correlation-id
The correlation identifier of the thread that is associated with the plan identified by *plan-id*. Correlation IDs that begin with values between 001 and 028 identify system agents.

connection-id
The connection identifier of the plan identified by *plan-name*.

luw-id
The logical unit of work identifier (LUWID) of *plan-name*.

***
The thread does not have a LUWID.

luw-id=token
The logical unit of work ID and a five-digit token value. The token value can be used in any Db2 command that accepts a LUWID as input.

thread-information
Information about the thread. The information is presented in a colon-delimited list that contains the following segments:

- The primary authorization ID that is associated with the thread.
- The name of the user's workstation.
- The ID of the user.
- The name of the application.
- The statement type for the previously executed statement: dynamic or static.
- The statement identifier for the previously executed statement, if available. The statement identifier can be used to identify the particular SQL statement. For static statements, the statement identifier correlates to the STMT_ID column in the SYSIBM.SYSPACKSTMT table. For dynamic statements, the statement identifier correlates to the STMT_ID column in the DSN_STATEMENT_CACHE_TABLE table. That statement might not have contributed to the current failure.
- The name of the role that is associated with the thread.
- The correlation token that can be used to correlate work at the remote system with work performed at the Db2 subsystem. The correlation token, if available, is enclosed in '<' and '>' characters, and contains three components, separated by periods:
  - A 3 to 39 character IP address.
  - A 1 to 8 character port address.
  - A 12 character unique identifier.

An asterisk (*) in any segment indicates that the information is not available.

member-name
The name of the member of theDb2 subsystem on which the indoubt thread is executing.

This message is issued by the service controller subcomponent.

System action

Processing continues.

The SQLCA that corresponds to the correlation ID, connection ID, and LUWID of the plan identified by *plan-name* contains the name of the resource that is involved in the timeout and one of the following SQL codes: -904, -911 , -913, or -923.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- SYSABEND, SYSUDUMP, or SYSMDUMP output.

Related information
DSNT376I

PLAN=*plan-name1* WITH CORRELATION-ID=*correlation-id1* CONNECTION-ID=*connection-id1* LUW-ID=*luw-id1* THREAD-INFO=*thread-information1* IS TIMED OUT. ONE HOLDER OF THE RESOURCE IS PLAN=*plan-name2* WITH CORRELATION-ID=*correlation-id2* CONNECTION-ID=*connection-id2* LUW-ID=*luw-id2* THREAD-INFO= *thread-information2* ON MEMBER *member-name*

-904 (Db2 Codes)
-911 (Db2 Codes)
-913 (Db2 Codes)
-923 (Db2 Codes)

DSNT378I ***csect-name* PLAN=*plan-name* WITH CORRELATION-ID=*correlation-id* CONNECTION-ID=*connection-id* LUW-ID=*luw-id* THREAD-INFO=*thread-information* TIMED OUT BECAUSE OF A RETAINED LOCK HELD BY MEMBER *member-name***

Explanation

A plan cannot get an IRLM lock because the resource is held by a retained lock on behalf of another member in the data sharing group, and the amount of time to wait for the locked resource was exceeded. The member holding the retained lock has either failed, or is in the process of restarting to recover its retained locks.

plan-name
The name of the executing plan that is associated with this thread.

correlation-id
The correlation identifier of the thread that is associated with the plan identified by *plan-id*. Correlation IDs that begin with values between 001 and 028 identify system agents.

connection-id
The connection identifier of the plan identified by *plan-name*.

luw-id
The logical unit of work identifier (LUWID) of *plan-name*.

***
The thread does not have a LUWID.

luw-id=token
The logical unit of work ID and a five-digit token value. The token value can be used in any Db2 command that accepts a LUWID as input.

thread-information
Information about the thread. The information is presented in a colon-delimited list that contains the following segments:

- The primary authorization ID that is associated with the thread.
- The name of the user's workstation.
- The ID of the user.
- The name of the application.
- The statement type for the previously executed statement: dynamic or static.
- The statement identifier for the previously executed statement, if available. The statement identifier can be used to identify the particular SQL statement. For static statements, the statement identifier correlates to the STMT_ID column in the SYSIBM.SYSPACKSTMT table. For dynamic statements, the statement identifier correlates to the STMT_ID column in the DSN_STATEMENT_CACHE_TABLE table. That statement might not have contributed to the current failure.
- The name of the role that is associated with the thread.
- The correlation token that can be used to correlate work at the remote system with work performed at the Db2 subsystem. The correlation token, if available, is enclosed in '<' and '>' characters, and contains three components, separated by periods:
  - A 3 to 39 character IP address.
  - A 1 to 8 character port address.
  - A 12 character unique identifier.

An asterisk (*) in any segment indicates that the information is not available.

member-name
The name of the member of the failed or restarting Db2 subsystem that holds the conflicting retained lock.

This message is issued only if the RETLWAIT installation parameter in DSN6SPRM is set to YES. If RETLWAIT is set to NO, which is the default setting, then any IRLM lock that conflicts with a retained lock will not wait, but instead will be rejected immediately. (See reason codes 00C900BE and 00C20254.)

System action

Processing continues.

The SQLCA that corresponds to the correlation ID, connection ID, and LUWID of the plan identified by *plan-name* contains the name of the resource that is

involved in the timeout and one of the following SQL codes: -904, -911 , -913, or -923.

System programmer response

Restart the member holding the retained lock, if it has not already been restarted.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- SYSABEND, SYSUDUMP, or SYSMDUMP output.

Related information

-904 (Db2 Codes)
-911 (Db2 Codes)
-913 (Db2 Codes)
-923 (Db2 Codes)
00C20254 (Db2 Codes)
00C900BE (Db2 Codes)

DSNT379I CANNOT IDENTIFY TO IRLM. INVALID SSNAME OR IRLM IS NOT CURRENTLY ACTIVE

Explanation

Either an attempt was made to identify the IRLM with a subsystem name not recognized by MVS, or the IRLM is not currently active. This message is also issued if common service area (CSA) storage is insufficient.

System action

Db2 abends with a reason code of X'04E'.

Operator response

Notify system programmer.

System programmer response

This is probably a user error. Change the IRLMSID parameter in the Db2 DSN6SPRM initialization macro to match the MVS subsystem table, or start IRLM if IRLM is not already up. See return code 00E30079 for further information about determining the cause of the error.

DSNT380I CANNOT IDENTIFY TO IRLM, SSNAME ALREADY IN USE

Explanation

Either Db2 previously terminated and did not successfully sign off from IRLM, or another subsystem is identified to IRLM with this installation-defined SSNAME. This message accompanies abend reason code X'00E30071'.

System action

Db2 is abended with an abend code of X'04E'.

Operator response

Notify the system programmer.

System programmer response

Either manually stop IRLM, or change the installation-defined SSNAME.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Listing of DSNZPARM module used.
- IRLM trace output.

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DSNT381I IRLM QUIT REQUEST FAILED, RC = *reason-code* , SC = *sub-code*

Explanation

During the QUIT (or signoff) request to the IMS/VS Resource Lock Manager, a return code and subcode were returned indicating an unsuccessful completion of the request.

System action

This message indicates that the Db2 subsystem shutdown could not be completed normally.

Operator response

Notify the system programmer.

System programmer response

Determine the cause of the failure from the return code and subcode, and correct the error. Db2 has

terminated but has not signed off from IRLM. It will be necessary to issue the 'F irlmproc, ABDUMP' command to stop the IRLM. This must be done before issuing another -START DB2 command.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Listing of DSNZPARM module used.
- IRLM trace output.

Related concepts

IRLM return and reason codes (IRLM)

DSNT382I IRLM AUTO-START FAILED

Explanation

During the IDENTIFY to IRLM, the AUTO-START of IRLM using SVC 34 failed. This message accompanies abend code X'00E30080'.

System action

Db2 is terminated with an abend code of X'04E'.

Operator response

Notify the system programmer.

System programmer response

Determine the cause of failure from the SVC 34 return code preserved in register 2.

DSNT383I *csect-name* IRLM AUTO-STOP FAILED

Explanation

During a sign off from IRLM caused by either Db2 normal shutdown (CSECT DSNTLQUI) or Db2 subsystem termination (CSECT DSNTLCLE), an AUTO-STOP of IRLM using SVC 34 failed. If this occurred during normal sign off, this message accompanies abend reason code X'00E30075'.

System action

Db2 abends.

Operator response

Notify the system programmer.

System programmer response

Manually stop IRLM.

Problem determination

Determine the cause of failure from the SVC return code preserved in register 2.

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Listing of DSNZPARM module used.

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DSNT384I IRLM AUTO-START WAIT TIME EXCEEDED

Explanation

An attempt was made to automatically start IRLM. However, the wait time specified was exceeded.

System action

Db2 is abended.

Operator response

Notify the system programmer.

System programmer response

Either manually start IRLM or modify the installation-defined auto-start wait time. Restart Db2.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Listing of DSNZPARM module used.

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Check the IRLMID given in the IRLM procedure against the IRLMSID in macro DSN6SPRM which was in the DSNZPARM used at startup.

DSNT397I

Explanation

This message consists of a single space. It is part of the output from the DISPLAY DATABASE or DISPLAY BLOCKERS command. These commands are described in the messages "DSNT361I" on page 527 and "DSNT369I" on page 536.

DSNT398I

Explanation

This message appears within a multiple line WTO message set and precedes DSNT391I, DSNT393I, and DSNT395I. It is used to underscore the column headings.

This message is issued by CSECT: DSNTDMUL

DSNT399I INVALID *space-name*

Explanation

The space name that was specified on the DISPLAY DATABASE command does not exist.

space-name
The name of the table space or index space that was specified for the SPACENAM option.

System action

The request is rejected.

User response:
Specify a valid space name and reissue the DISPLAY DATABASE command.

Related reference
-DISPLAY DATABASE (Db2) (Db2 Commands)

DSNT400I SQLCODE = 0, SUCCESSFUL EXECUTION

Explanation

The SQLCODE was 0, indicating successful execution of the function. SQLWARN indicators might note some warnings. .

System action

Processing continues.

Operator response

No action is required.

Related concepts
SQL communication area (SQLCA) (Db2 SQL)
Related reference
Description of SQLCA fields (Db2 SQL)

DSNT402I ONLINE BOOK DATA SET NAMES MUST END IN '.BOOK'

Explanation

All book names entered on this panel must end in ".BOOK".

This message is issued by panel: DSNTIPA0

System action

The panel is redisplayed with the error message.

User response

Replace the book name or names with a value that ends in ".BOOK".

DSNT404I SQLCODE = *sql-code*, *explanation*

Explanation

This message contains an SQL return code and a brief explanation, with text inserted from the SQLERRM field. The SQL return code is positive, indicating a warning condition.

System programmer response

Determine the cause for the SQL warning code, and correct the situation if needed. Rerun the application program or SQL statement.

Related concepts
Successful execution SQL codes (Db2 Codes)
Related reference
Description of SQLCA fields (Db2 SQL)

DSNT405E csect-name DISPATCH PRIORITIES NOT IN SYNC: ccccccc1: hhh1 COMPARED TO ccccccc2: hhh2

Explanation

The dispatch priorities of task 'ccccccc1' (dispatch priority 'hhh1') and task 'ccccccc2' (dispatch priority 'hhh2') are found to be incorrect in relation to each other. This can cause severe performance problems and possible failure of either task 'ccccccc1', task 'ccccccc2', or other tasks.

System action

Db2 continues with possible problems described above.

Operator response

Notify the system programmer.

System programmer response

Modify the dispatch priority algorithms for the two tasks to meet documented requirements. For instance, IRLM must have a higher dispatch priority than Db2.

DSNT406I THE ART/ORT ESCAPE CHARACTER CANNOT BE % OR _

Explanation

You specified the percent sign (%) or the underscore character (_) as the application registration table/object registration table (ART/ORT) escape character. The ART/ORT escape character can be any other character.

System action

The panel is redisplayed and the cursor is placed on the field that produced the error.

User response

Change the ART/ORT escape character value.

DSNT407I THIS FIELD HAS AN INVALID FORMAT

Explanation

The field must be NOLIMIT, 1440, 0, or minutes and seconds separated by a comma.

This message is issued by the following panel: DSNTIPA

System action

The panel is redisplayed and the cursor is placed on the field in error.

User response

Correct the input.

DSNT408I SQLCODE = *-sql-code, explanation*

Explanation

This message contains an SQL return code and a brief explanation, with text inserted from the SQLERRM field. The SQL return code is negative, indicating that an error has occurred.

System programmer response

Determine the cause for the SQL error by using information about that specific SQLCODE. Correct the error. Rerun the application program or SQL statement.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Listing of the results produced by the SQL statements.
- Source listing of the failing application program.

Related concepts

SQL error codes (Db2 Codes)

Related reference

Description of SQLCA fields (Db2 SQL)

DSNT409I BUFFERPOOL SIZES SHOWN MAY BE OBSOLETE

Explanation

The buffer pool sizes shown here were set at installation or migration time and might not be the most current. Updates might have occurred using the ALTER BUFFERPOOL command.

System action

Processing continues.

DSNT410I THE SUBSYSTEM COMMAND PREFIX ENTERED IS INCORRECT

Explanation

An incorrect command prefix was entered. The first character of the command prefix must be one of the following characters:

Character	Description
@	at sign
$	dollar sign
#	number sign

Character	Description
.	period
/	forward slash
'	apostrophe
?	question mark
"	quotation mark
%	percent sign
!	exclamation point
<	less than symbol
)	closing parenthesis
*	asterisk
+	plus sign
-	minus sign
=	equal sign
¢	cent sign
:	colon
_	underscore
;	semicolon
|	vertical bar

For the other characters in the command prefix, you can use any character from the preceding set, uppercase letters (A-Z), and digits (0-9).

This message is issued by the following panel: DSNTIPM

System action

The panel is redisplayed and the cursor is placed on the field in error

User response

Enter a valid command prefix

DSNT411I SQLCAID = xxxx, SQLCA IDENTIFIER

Explanation

The SQLCA ID field (SQLCAID) is not the expected value, C'SQLCA'.

System programmer response

The SQLCA area is invalid. This type of error is usually the result of one of the following:

- Calling the DSNTIAR formatting routine before an SQL statement initializes the area
- Overlaying the SQLCA area
- Passing the wrong address to the DSNTIAR routine.

Correct the error, and rerun the application program.

DSNT412I SQLCABC = xxxx, SQLCA BYTE COUNT

Explanation

The size of the SQLCA is not the expected value (136 bytes).

System programmer response

The SQLCA area is invalid. Correct the error. It is probably an overlay or an incorrect SQLCA address. Rerun the application program.

DSNT413I SQLCODE = xxxx, INVALID SQLCODE

Explanation

The SQL return code is not a valid value.

System programmer response

Either the SQLCA area is invalid or the maintenance was not coordinated correctly. As a result, the SQL return code was added to the Db2 subsystem but not to the formatting routine.

An invalid SQLCA area is usually the result of one of the following:

- Calling the DSNTIAR formatting routine before an SQL statement initializes the area
- Overlaying the SQLCA area
- Passing the wrong address to the DSNTIAR routine.

If the maintenance was not coordinated correctly, the DSNTIAR and DSNTIAM CSECTs were probably not replaced in the code that is now running. Link-edit the load module, and replace DSNTIAR and DSNTIAM. Correct the error, and rerun the application program.

DSNT414I SQLERRM = xxxx, SQLCA ERROR MESSAGE INSERTION TEXT

Explanation

This message results from an SQL return code that is not recognized by DSNTIAR. SQLERRM contains error message text.

System programmer response

Either the SQLCA area is invalid or the maintenance was not coordinated correctly. As a result, the SQL return code was added to the Db2 subsystem but not to the formatting routine.

An invalid SQLCA area is usually the result of one of the following:

- Calling the DSNTIAR formatting routine before an SQL statement initializes the area
- Overlaying the SQLCA area
- Passing the wrong address to the DSNTIAR routine.

If the maintenance was not coordinated correctly, the DSNTIAR and DSNTIAM CSECTs were probably not replaced in the code that is now running. Link-edit the load module, and replace DSNTIAR and DSNTIAM. Correct the error, and rerun the application program.

DSNT415I SQLERRP = xxxx, SQL PROCEDURE DETECTING ERROR

Explanation

The name of the procedure detecting the error is provided in the SQLERRP.

System programmer response

(The SQL procedure detecting the error may be of help in diagnosing an error or warning.) Correct the error if there is one noted in other messages. Rerun the program or SQL statement.

DSNT416I SQLERRD = *field-1*, *field-2*, *field-3*, *field-4*, *field-5*, *field-6* SQL DIAGNOSTIC INFORMATION

Explanation

One or more of the six diagnostic fields do not have the expected value. The diagnostic fields should contain one of the following expected sets of values:

- 00, 00, 00, 00, 00, 00
- 00, 00, 00, -1, 00, 00

field-1
Db2 unique internal relational data system code.

field-2
Db2 internal data manager error code.

field-3
One of the following conditions:

- Number of rows inserted, updated, or deleted following an INSERT, UPDATE, MERGE or DELETE statement.

  Attention: A -1 in this field indicates that a mass delete of a table in a segmented table space was performed, wherein Db2 does not access nor count individual rows.

- For SQLCODE -911 or -913, a reason code that indicates whether a deadlock or timeout occurred.

  Tip: The most common reason codes are:

  – 00C90088 - deadlock

  – 00C9009E - timeout

field-4
Reserved.

field-5
Position or column of a syntax error for PREPARE or EXECUTE IMMEDIATE.

field-6
Db2 internal buffer manager error code.

System action

Processing continues.

System programmer response

The SQL diagnostic information might help in diagnosing an error or in indicating the results of successful execution. If this error or warning should not occur, correct the error. Rerun the program or SQL statement.

Related reference
GET DIAGNOSTICS (Db2 SQL)
Description of SQLCA fields (Db2 SQL)
Related information
-911 (Db2 Codes)
-913 (Db2 Codes)
00C90088 (Db2 Codes)
00C9009E (Db2 Codes)

DSNT417I SQLWARNn-n SQL WARNINGS

Explanation

At least one of the 11 warning values is not the expected value (a blank). A nonblank value in one of the 11 warning fields has the following meaning:

SQLWARN0
Any other warning code is set.

SQLWARN1
String truncation.

SQLWARN2
Null value(s) eliminated.

SQLWARN3
Number of host variables provided did not equal degree of the table.

SQLWARN4
No WHERE clause on UPDATE or DELETE.

SQLWARN5
Not a Db2 SQL statement.

SQLWARN6
Date or timestamp value adjusted.

SQLWARN7
Conversion of decimal number from precision 31 to precision 15 caused truncation of fractional digits.

SQLWARN8
Character that does not exist on the target code page was replaced with a substitution character.

SQLWARN9
Arithmetic exceptions have been ignored during processing of COUNT DISTINCT.

SQLWARNA
At least one character field of the SQLCA is invalid due to a string conversion error.

User response

The SQL warning information may be of help in diagnosing an error or in indicating the results of successful execution. If this warning should occur, correct the error and rerun the program or SQL statement.

DSNT418I **SQLSTATE = *sqlstate*, SQLSTATE RETURN CODE**

Explanation

The SQLSTATE is a return code that indicates the outcome of the most recently executed SQL statement. The execution of every SQL statement sets SQLSTATE to a five-digit code in the range of 00000 to 65535. This has no effect on the existing use of any other field in the SQLCA.

User response

Examine the SQLSTATE value. If necessary, correct the SQL statement and reissue it.

Related concepts
SQL communication area (SQLCA) (Db2 SQL)

Related tasks
Checking the execution of SQL statements by using SQLCODE and SQLSTATE (Db2 Application programming and SQL)

Related reference
SQLSTATE values and common error codes (Db2 Codes)
SQLSTATE (Db2 SQL)

DSNT419I **WARNING - MAX REMOTE ACTIVE PREVIOUSLY SPECIFIED AS 0.**

Explanation

You specified a value of 0 for the number of active database access threads on a previous panel. This value might be inconsistent with a DDF STARTUP OPTION of AUTO or COMMAND.

This message is issued by the following panel: DSNTIPR

System action

The panel is redisplayed and the cursor is placed on the DDF STARTUP OPTION field.

User response

No response is necessary if your intent is to have DDF started with no active database access threads allocated and DDF is used as a requester only. Press ENTER to continue. Otherwise, either change the DDF STARTUP OPTION to NO or MAX REMOTE ACTIVE to the number of threads you want.

Severity

4 (warning)

DSNT422I **THE ART TABLE NAME MUST BE DIFFERENT FROM THE CRT TABLE NAME**

Explanation

You entered the same name for the Application Registration Table and the Object Registration Table on the Data Definition Control Support panel.

This message is issued by the following panel: DSNTIPZ

System action

The panel is redisplayed and the cursor is placed on the field in error.

User response

Change either the APPL REGISTRATION TABLE field or the OBJT REGISTRATION TABLE field to make these two fields unique with respect to each other.

DSNT424I **OUTPUT DATA SETS MUST BE DIFFERENT FROM THE INPUT DATA SETS**

Explanation

You specified an output data set name that is the same as one of the input data set names built from the PREFIX and SUFFIX fields on the main panel DSNTIPA1.

This message is issued by the following panel: DSNTIPT

System action

The panel is redisplayed and the cursor is placed on the field in error.

User response

Either change the data set name under the cursor or change the PREFIX or SUFFIX fields on panel DSNTIPA1.

DSNT425I **ALL THREE OUTPUT DATA SETS MUST BE UNIQUE**

Explanation

You specified the same name for two or more of the output data sets.

This message is issued by the following panel: DSNTIPV

System action

The panel is redisplayed and the cursor is placed on the field in error.

User response

Change the data set name under the cursor or the data set field(s) that are the same as the one under the cursor.

DSNT426I **ALL THREE DATA SETS ARE REQUIRED FOR OUTPUT**

Explanation

You specified one or more output data sets and left one or more output data set fields blank.

This message is issued by the following panel: DSNTIPT

System action

The panel is redisplayed and the cursor is placed on the field in error.

User response

You must specify all or none of the output data set fields. Leave blank all output data set fields if you do not want the installation CLIST to edit any CLISTs or JCL.

DSNT427I **THE DATA SET OR MEMBER SPECIFIED COULD NOT BE LOCATED**

Explanation

The input parameter member for the INPUT MEMBER NAME field or the DATA SET NAME(MEMBER) field for migration could not be found.

This message is issued by the following panel: DSNTIPA1

System action

The panel is redisplayed and the cursor is placed on the field in error.

User response

Verify that you entered an existing data set and member in that data set. Also verify that the data set is cataloged.

DSNT428I **WHEN USING TIMESTAMPS, THE PREFIX MUST BE <= *preflen* CHARACTERS LONG**

Explanation

YOU HAVE ENTERED AN ARCHIVE LOG PREFIX LONGER THAN ALLOWED. The archive log prefix names must not exceed 19 characters when the TIMESTAMP ARCHIVES value is YES and must not exceed 17 characters when the TIMESTAMP ARCHIVES value is EXT.

This message is issued by the following panel: DSNTIPH

System action

The panel is redisplayed and the cursor is placed on the field in error.

User response

Reduce the length of the prefix or change the TIMESTAMP ARCHIVES value to NO.

DSNT429I **THE SUM OF MAX USERS AND MAX REMOTE ACTIVE MUST BE <= TO 2000**

Explanation

The total number of threads determined by MAX USERS and MAX REMOTE fields is too large.

System action

The panel is redisplayed and the cursor is placed on the field in error.

User response

Reduce the MAX USERS field, or the MAX REMOTE field, or both.

DSNT430I THIS FIELD MAY ONLY BE FILLED IN FOR MIGRATE MODE

Explanation

You can only specify the FROM RELEASE or DATA SET NAME(MEMBER) fields for INSTALL TYPE of MIGRATE.

This message is issued by the following panel: DSNTIPA1

System action

The panel is redisplayed and the cursor is placed on the field in error.

User response

Change the INSTALL TYPE to MIGRATE or blank out the field under the cursor.

DSNT431I DDF, MIXED DATA, OR DEF ENCODING SCHEME CONFLICTS WITH CODED CHAR SET

Explanation

An invalid EBCDIC or ASCII coded character set (CCSID) value is not valid for the specified fDDF, MIXED DATA, or DEF ENCODING SCHEME. The following restrictions apply to these values:

- With a MIXED DATA value of 'YES', you must choose a valid mixed CCSID value for the EBCDIC CCSID. The ASCII CCSID must be a valid mixed value or zero.
- With a MIXED DATA value of 'NO', you must choose a valid SBCS CCSID value or zero for EBCDIC CCSID or ASCII CCSID.
- With a DDF value of 'AUTO' or 'COMMAND', you must choose a non-zero value for the EBCDIC CCSID.
- With a DEF ENCODING SCHEME value of 'ASCII', you must choose non-zero values for EBCDIC CCSID and ASCII CCSID.

This message is issued by the following panels: DSNTIPF, DSNTIPR

System action

The panel is re-displayed and the cursor is placed on the field in error.

User response

Correct either the DDF, MIXED DATA, or DEF ENCODING SCHEME value or the EBCDIC CCSID or ASCII CCSID value to correct the incompatibility.

Related reference

EBCDIC and ASCII support (Db2 Installation and Migration)

DSNTIPF: Application programming defaults panel 1 (Db2 Installation and Migration)

DSNTIPR: Distributed data facility panel 1 (Db2 Installation and Migration)

DSNT433I MAX REMOTE ACTIVE MUST BE <= MAX REMOTE CONNECTED.

Explanation

The number of active database access threads cannot be larger than the number of concurrent database access threads.

System action

The panel is displayed again, and the cursor is placed on the field in error.

User response

Take either or both of the following actions:

- Reduce the value of the MAXDBAT subsystem parameter
- Increase the value CONDBAT subsystem parameter

Severity

8 (error)

Related reference

MAX REMOTE ACTIVE field (MAXDBAT subsystem parameter) (Db2 Installation and Migration)

MAX REMOTE CONNECTED field (CONDBAT subsystem parameter) (Db2 Installation and Migration)

DSNT434I WARNING, DATA SETS MARKED WITH ASTERISKS EXIST AND WILL BE OVERWRITTEN

Explanation

The data sets marked with asterisks already exist. If you continue, the installation process will delete the existing data set and allocate a new one for tailored job output.

This message is issued by the following panel: DSNTIPT

User response

You should:

1. Press ENTER to continue; the data set(s) will be deleted and reallocated OR
2. Press RETURN to leave the installation process; the data set(s) will not be deleted OR
3. Change the data set name(s); the new name will be checked for existence.

Severity

4

DSNT435I DSNT435I OVERRIDE VALUES ARE IN EFFECT

Explanation

Calculated values for EDMPOOL, SORTPOOL, or RIDPOOL on panel DSNTIPC were previously overridden. Installation uses any override values displayed.

System action

The display shows the override values instead of the calculated values.

User response

No response is necessary if you want to use the override values. If you want to use the calculated values, erase the values in the override column.

Severity

4

DSNT436I REGION SIZE MAY BE TOO LARGE

Explanation

The numbers you specified produced a region size estimate of more than 5000KB. This region size estimate does not include the storage required for SWA because it is assumed that SWA has been placed above the line. If a larger private area is permitted, you should increase the region size on the Db2 start procedures.

This message is issued by the following installation CLIST: DSNTINST

System action

The CLIST continues.

User response

Check the values entered for numbers of concurrent users and databases, buffers, and plan sizes. Check the available private region size. If this region size is not permitted, these numbers need to be reduced. If the size is permitted, this warning can be ignored.

Problem determination

The region size calculation is shown in the DSNT485I through DSNT487I messages. If you suspect an error in the process, set CONTROL(CONLIST) and invoke the CLIST. This produces tracing for error documentation.

For more information about activating the CLIST trace facility, see Activating the CLIST trace facility (Diagnosing Db2 problems).

Severity

4 (warning)

Related concepts

Virtual storage requirements for storage pools and working storage (Db2 Installation and Migration)

The Db2 installation CLIST panel session (Db2 Installation and Migration)

Related tasks

Tailoring Db2 11 installation and migration jobs with the CLIST (Db2 Installation and Migration)

Activating the CLIST trace facility (Diagnosing Db2 problems)

DSNT437I REGION SIZE IS TOO LARGE

Explanation

The numbers you specified produced a region size estimate of more than 8000KB. This estimate does not include the storage required for SWA, because it is assumed that you placed SWA above the 16MB line.

This message is issued by the following installation CLIST: DSNTINST

System action

The CLIST continues, but does not produce edited jobs.

User response

Check the numbers entered for numbers of concurrent users and databases, buffers, and plan sizes. One or more of these numbers needs to be reduced.

Problem determination

If you suspect an error in the process, set CONTROL(CONLIST) and invoke the CLIST. This produces tracing for error documentation.

For more information about activating the CLIST trace facility, see Activating the CLIST trace facility (Diagnosing Db2 problems).

Severity

8 (error)

Related concepts

Virtual storage requirements for storage pools and working storage (Db2 Installation and Migration)

The Db2 installation CLIST panel session (Db2 Installation and Migration)

Related tasks

Tailoring Db2 11 installation and migration jobs with the CLIST (Db2 Installation and Migration)

Activating the CLIST trace facility (Diagnosing Db2 problems)

DSNT438I **WARNING, IRLM LOCK MAXIMUM SPACE = *specified-max* MB, AVAILABLE SPACE = *available-space* MB**

Explanation

The maximum number of locks allowed for each user could exceed what is available to the IRLM.

specified-max
The estimated maximum amount of space specified as IRLM LOCK MAXIMUM SPACE on panel DSNTIPC.

available-space
The amount of space that is available for IRLM locks. The available space is specified in the MAX STORAGE FOR LOCKS field of the DSNTIPJ installation panel, and is never less than 2 GB.

All threads are not likely to have the maximum number of locks. However, if the *specified-max* value exceeds the amount of available space by a significant factor, the possibility of abends in the IRLM increases.

System action

The CLIST continues.

User response

Choose one of the following responses:

- Ensure that you can run with the overcommitment of lock address space.
- Reduce the values of the MAX USERS, MAX REMOTE ACTIVE, or LOCKS PER USER fields.
- Increase the value of the MAX STORAGE FOR LOCKS field.

Severity

4 (warning)

Related tasks

Estimating the storage needed for locks (Db2 Performance)

Related reference

DSNTIPC: CLIST calculations panel 1 (Db2 Installation and Migration)

DSNTIPJ: IRLM panel 2 (Db2 Installation and Migration)

MAX USERS field (CTHREAD subsystem parameter) (Db2 Installation and Migration)

MAX REMOTE ACTIVE field (MAXDBAT subsystem parameter) (Db2 Installation and Migration)

LOCKS PER USER field (NUMLKUS subsystem parameter) (Db2 Installation and Migration)

MAX STORAGE FOR LOCKS field (Db2 Installation and Migration)

DSNT439I **IRLM NO LOCK ESCALATION OR NO USER MAXIMUM**

Explanation

You specified the number 0 for:

- The number of table or table space locks that will cause lock escalation, or
- The number of locks that will terminate a Db2 user.

A lock escalation value of 0 turns off lock escalation and means that Db2 cannot use this means of conserving lock space. A user maximum of 0 means that the calculation noted in the DSNT438 message cannot be performed to see if the IRLM has sufficient address space for all users, since there is no maximum per user.

This message is issued by the following installation CLIST: DSNTINST

System action

The CLIST will continue. This is only a warning.

User response

Turn off lock escalation and/or user lock limiting.

Severity

4 (warning)

DSNT440I TOTAL BP SIZE TOO LARGE

Explanation

The total size of a buffer pool is too large. The summation of the *ssnm*DBM1 address space storage requirements for all buffer pools cannot exceed 1TB. When calculating the storage requirements for the buffer pools, Db2 uses the page size (4K, 8K, 16K, or 32K) for each buffer.

System action

The panel is redisplayed and the cursor is placed on the field in error.

User response

Reduce one or more of the buffer pool sizes.

DSNT442E ERROR, VIRTUAL STORAGE OF main EXCEEDS THE SYSTEM LIMIT OF 2 GIGABYTES

Explanation

The total of all virtual storage calculations exceeds the maximum amount possible for an address space.

This message is issued by the following CLIST: DSNTINST

System action

The installation CLIST returns to the initial panel without editing the installation jobs.

User response

Respecify installation values that determine storage sizes so that the 2 GB limit is not exceeded.

Severity

8 (error)

DSNT443I VALUES MARKED WITH AN ASTERISK HAVE BEEN UPDATED

Explanation

An asterisk is placed before the description of fields which were generated by the DSNTINST CLIST. This message only appears when you update field(s) from a prior panel used to generate the fields on the current panel.

This message is issued by the following panels: DSNTIPA, DSNITPL

System action

The panel is displayed.

User response

Verify that the current value is what you want. If it is not, enter the correct value.

DSNT444I SCROLLING BACKWARD MAY CHANGE FIELDS MARKED WITH ASTERISKS

Explanation

The marked fields on the current panel are generated from fields on other panels. If you scroll backward, these fields may be updated to reflect new values from other panels. For example, the ARCHIVE PREFIX field is generated from the CATALOG ALIAS field on DSNTIPA2. Message DSNT443I will be displayed to inform you when fields are changed by the DSNTINST CLIST.

This message is issued by the following panels: DSNTIPA, DSNITPL

System action

The panel is displayed.

User response

No action required.

DSNT445I REMOTE LOCATION NAME MUST NOT BE THE SAME AS LOCAL LOCATION

Explanation

The name entered for the remote sample location was the same as the local location name.

This message is issued by the following installation panel: DSNTIPY

System action

The panel is displayed.

User response

Enter a remote location name or leave the field blank to indicate that the organization sample will only be executed locally.

DSNT446I SAMPLE LOCATION MUST BE BLANK IF LOCAL LOCATION IS BLANK

Explanation

In order to edit the remote sample jobs, both the Db2 LOCATION NAME (local location) on panel DSNTIPR and the REMOTE LOCATION must have valid names. If the Db2 LOCATION NAME is unknown, leave both fields blank and the remote sample jobs will not be edited.

This message is issued by the following panel: DSNTIPY

System action

The panel is displayed.

User response

Either scroll back to the DISTRIBUTED DATA FACILITY panel and enter a value for the Db2 LOCATION NAME, or enter a blank in the REMOTE LOCATION field on the job editing panel.

DSNT448I STG AVAILABLE ABOVE 2GB = size T

Explanation

This is the estimated amount of real storage recommended to support the virtual storage sizes chosen.

The amount of real storage needed varies greatly, and you might find that you need several times more storage than the estimate that is shown.

This message is issued by the following CLIST: DSNTINST

System action

The CLIST continues.

User response

Compare this recommended value with the actual available real storage.

Severity

0 (successful execution)

Related concepts

Virtual storage requirements for storage pools and working storage (Db2 Installation and Migration)

The Db2 installation CLIST panel session (Db2 Installation and Migration)

Related tasks

Tailoring Db2 11 installation and migration jobs with the CLIST (Db2 Installation and Migration)

Activating the CLIST trace facility (Diagnosing Db2 problems)

DSNT449I NUMBER OF LOGS REDUCED FROM old-num TO MAXIMUM OF 31

Explanation

The number of active log data sets used in the Db2 release you are migrating from is greater than the new maximum number of data sets allowed for the current release of Db2. Installation job DSNTIJUZ will update your bootstrap data sets to contain only the last 31 data sets.

This message is issued by the following panel: DSNITPL

System action

The value is reduced to the maximum of 31 and the panel is displayed.

User response

Update any other fields on the panel and continue.

DSNT450I type ENTRY MUST BE EXACTLY TWO CHARACTERS

Explanation

These entries are used to complete SYS1.PARMLIB member names and must be exactly two characters. The type is:

APF AUTH
For the APF-authorized library list IEAAPFxx

LINK LIST
For the link list library concatenation LNKLSTxx

MVS SUBSYS
For the MVS subsystem list IEFSSNxx

This message is issued by the following installation CLIST: DSNTINST

System action

The CLIST will continue.

User response

Check your entries for these fields on the MVS panel and make them exactly two characters. See job

DSNTIJMV that was produced and correct the IEBUPDTE CHANGE statement.

Severity

8 (error)

DSNT451I WARNING-THE LOCAL DATE LENGTH OR LOCAL TIME LENGTH HAS BEEN INCREASED

Explanation

The LOCAL DATE LENGTH or LOCAL TIME LENGTH has been increased and a REBIND command must be issued for any dependent plans.

This message is issued by the following installation CLIST: DSNTINST

System action

Processing continues.

User response

Rebind all application plans that depend upon the length of the local format that was changed.

Severity

4 (warning)

DSNT454I ERROR CODE = errcode, CNT = count

Explanation

An error was encountered during CLIST processing for reading the parameter member. Most of these errors are caused by having a mismatch between the level of the CLIST and that of the parameter member being read.

The 'errcode' is an error code defined for the CLIST. The error code values and associated meanings are found in *TSO/E CLISTS*.

The 'count' value is the number of parameter values already read.

This message is issued by the following installation CLIST: DSNTINST

System action

The CLIST will terminate.

User response

Be sure the parameter member and the CLIST are at the same level.

Problem determination

If you suspect an error in the process, set CONTROL(CONLIST) and invoke the CLIST in batch, so that the tracing can be sent with the error documentation. You will also need the listing of the CLIST and the parameter member being read.

DSNT456I ERROR IN VARIABLE varname, VALUE IS value

Explanation

The variable named 'varname' does not have a valid value. Its current value is 'value'. Subsequent messages will describe the reason the value is invalid and the action taken by the CLIST.

If the error is in the CONTROL value, the value was specified when the CLIST was invoked. The value is not valid, and no additional tracing will be done. The permitted values are NONE, LIST, CONLIST, and SYMLIST. Each value produces more CLIST tracing information than those which precede it. If the error is in other values, the value was specified when the CLIST was invoked on the ISPF panels.

This message is issued by the following installation CLIST: DSNTINST

System action

The CLIST will continue, but will not produce jobs or parameter data.

User response

Check the subsequent messages. Exit, then invoke the CLIST with a valid value for the variable.

Problem determination

If you suspect an error in the process, set CONTROL(CONLIST) and invoke the CLIST in batch, so that the tracing can be sent with the error documentation. The CLIST itself and the parameter member read in should be sent as well.

Severity

8 (error)

DSNT457I The SUBSYSTEM NAME MUST BE DIFFERENT THAN THE PROC NAME

Explanation

Internal MVS restrictions require that the IRLM subsystem name be different than the procedure name.

This message is issued by the following panel: DSNTIPI

System action

The panel is redisplayed and the cursor is placed on the field in error.

User response

Change either the SUBSYSTEM NAME or the PROC NAME so these fields are unique with respect to each other.

DSNT458I VALUE MUST BE NUMERIC

Explanation

The variable named in message DSNT456I must be an integer. Only digits are allowed, with no decimal point or fractions. If the value is a number suffixed by K or M, it is interpreted as the indicated number multiplied by 1024 or 1048676. If any other non-numeric character is present in the value, or if the K or M is not the final character, this message is produced.

This message is issued by the following installation CLIST: DSNTINST

System action

The CLIST will continue, but will not produce edited jobs or parameter data.

User response

This CLIST will continue, but will not produce edited jobs. The value of the variable has been set to the value shown in message DSNT465I. You will need to reenter the output parameter and output data set prefix. Examine the value and reset it if needed.

Severity

8 (error)

DSNT459I VALUE IS TOO LOW, MINIMUM IS min

Explanation

The variable named in message DSNT456I must be larger than its current value. The minimum value allowed is 'min'.

This message is issued by the following installation CLIST: DSNTINST

System action

The CLIST will continue, but will not produce edited jobs. The CLIST resets the incorrect value to 'min'.

User response

See message DSNT465I for the CLIST action.

Severity

8 (error)

DSNT460I VALUE IS TOO HIGH, MAXIMUM IS max

Explanation

The variable named in message DSNT456I must be smaller than its current value. The maximum value allowed is 'max'.

This message is issued by the following installation CLIST: DSNTINST

System action

The CLIST will continue, but will not produce edited jobs. The CLIST resets the incorrect value to 'max'.

User response

See message DSNT465I for the CLIST action.

Severity

8 (error)

DSNT462I VALUE IS TOO LONG, MAXIMUM IS length CHARACTERS

Explanation

The variable named in message DSNT456I must be shorter than its current value. The maximum length allowed is 'length'.

This message is issued by the following installation CLIST: DSNTINST

System action

The CLIST will continue, but will not produce edited jobs. The CLIST resets the value to the default value.

User response

See message DSNT465I for the CLIST action.

Severity

8 (error)

DSNT463I DATA SHARING FIELD MUST BE BLANK IN UPDATE MODE.

Explanation

This field is not relevant in Update mode and must be blank This message is issued by panel: DSNTIPA1

System action

The panel is redisplayed and the cursor is placed on t field in error.

User response

Replace the value with a blank.

DSNT464I VALUES PERMITTED ARE values

Explanation

The variable named in message DSNT456I must be one of the 'values' listed.

This message is issued by the following installation CLIST: DSNTINST

System action

The CLIST will continue, but will not produce edited jobs.

User response

See message DSNT465I for the CLIST action.

Severity

8 (error)

DSNT465I VARIABLE varname SET TO value

Explanation

The variable, 'varname', named in message DSNT456I is in error. Possible reasons for the error are listed in messages: DSNT458I, DSNT459I, DSNT460I, DSNT462I, DSNT463I, DSNT464I.

This message is issued by the following installation CLIST: DSNTINST

System action

The CLIST will continue, but will not produce edited jobs. The value has been set to the value shown.

User response

Specify the output data again on the primary installation panel. You will be able to see and change the value. If this value is not acceptable, change it, noting the limits.

DSNT466I Output member cannot be DSNTIDSA, DSNTIDVB or DSNTIDXA.

Explanation

The OUTPUT MEMBER NAME field value must not be DSNTIDSA, DSNTIDVB, or DSNTIDXA. Members with these names are shipped with Db2 and must not be overwritten.

This message is issued by the following panel: DSNTIPA1

System action

The panel is re-displayed and the cursor is placed on the field in error.

User response

Change the value of the field under the cursor.

Important: If the member with the name that you specify already exists, it is overwritten.

Related concepts

The Db2 installation CLIST panel session (Db2 Installation and Migration)

Related reference

DSNTIPA1 or DSNTILA1: Main panel (Db2 Installation and Migration)

DSNT467I OUTPUT MEMBER SHOULD BEGIN WITH DSNTID

Explanation

The output parameter member will be placed into *prefix*.SDSNSAMP. This data set already has a large number of members. To avoid replacing a member that you need, a naming convention with prefix 'DSNTID' is strongly suggested. The suffixes 'VB' and 'XA' are not allowed (see message DSNT466I).

This message is issued by the following installation CLIST: DSNTINST

System action

The CLIST will continue.

User response

Specify a different name for the output member.

Severity

4 (warning)

DSNT468I ERROR(S) ENCOUNTERED, OUTPUT IS BYPASSED

Explanation

An error was detected earlier in this run. Because of the error, data set editing was not performed.

This message is issued by the following installation CLIST: DSNTINST

System action

The CLIST will continue, but will not produce edited jobs.

User response

Correct the errors noted earlier, and specify the output prefix name again to produce the edited data.

Severity

8 (error)

DSNT469I INPUT PARAMETERS MUST BE READ BEFORE MIGRATION

Explanation

The INPUT MEMBER NAME on panel DSNTIPA1 must have a value to allow migration values to be read. This is to permit the new values to be initialized.

This message is issued by the following installation CLIST: DSNTINST

System action

The CLIST will return to the main installation panel, DSNTIPA1.

User response

Specify DSNTIDXA as the INPUT MEMBER NAME and specify the current value for the migration member.

Severity

8 (error)

DSNT470I WARNING, ONLY ONE VOLUME WAS SPECIFIED

Explanation

Only one volume serial number was specified on the installation panel or CLIST invocation. This does not allow adequate recovery or performance unless it is intended to be a single volume test system.

This message is issued by the following installation CLIST: DSNTINST

System action

The CLIST will continue.

User response

If this subsystem is intended to be recoverable, more than one volume is needed. Rerun the installation tailoring process, specifying at least one more volume on the DSNTIPA2 panel. If this is just a single volume test system, be sure that you specify a single copy of the log data sets. The boot strap data sets are small and not active, so that two are recommended even on a single volume system.

Severity

4 (warning)

DSNT471I BEGINNING PARAMETER INPUT MEMBER inmem

Explanation

The input parameter member, 'inmem', is being read. This data includes values for all of the installation parameters.

This message is issued by the following installation CLIST: DSNTINST

System action

The CLIST will continue.

Severity

0 (successful execution)

DSNT472I WORK FILE DATABASE NAME CANNOT START WITH DSNDB EXCEPT FOR DSNDB07

Explanation

The work file database name cannot start with the characters DSNDB unless the name is DSNDB07.

This message is issued by the following panel: DSNTIPK

System action

The panel is redisplayed and the cursor is placed on the field in error.

User response

Change the name so that it does not start with DSNDB.

DSNT473I BEGINNING CHECK PHASE

Explanation

This message indicates the following:

- The values entered on the panels are being checked.
- Values which use the K or M suffix are being translated to numbers.

This message is issued by the following installation CLIST: DSNTINST

System action

The CLIST will continue.

Severity

0 (successful execution)

DSNT474I READING count, varname, datatype, data sharing scope, minval, maxval, currentval

Explanation

The values are being read from the parameter member. The count, the variable name, the data type, the data sharing scope, the minimum value, the maximum value, and the current value are shown. This message occurs when the CONTROL keyword requests a trace.

This message is issued by the following installation CLIST: DSNTINST

System action

The CLIST will continue.

Severity

0 (successful execution)

DSNT475I CHECK count, varname, type, minval, maxval, currentval

Explanation

This message indicates the following:

- The values read in or entered on the panels are being checked.
- Values which use the K or M suffix are being translated to numbers.

The count, the variable name, the data type, the minimum value, the maximum value, and the current value are shown. This message occurs when the CONTROL keyword requests a trace.

This message is issued by the following installation CLIST: DSNTINST

System action

The CLIST will continue.

Severity

0 (successful execution)

DSNT476I BEGINNING PARAMETER OUTPUT MEMBER outmem

Explanation

The output parameter member named 'outmem' is being written. This data includes values for all the installation parameters.

This message is issued by the following installation CLIST: DSNTINST

System action

The CLIST will continue.

Severity

0 (successful execution)

DSNT477I OUTPUT count, varname, type, minval, maxval, currentval

Explanation

The values entered on the panels are being written to the output parameter member. The count, the variable name, the data type, the minimum value, the maximum value, and the current value are shown. This message occurs when the CONTROL keyword requests a trace.

This message is issued by the following installation CLIST: DSNTINST

System action

The CLIST will continue.

Severity

0 (successful execution)

DSNT478I BEGINNING EDITED DATA SET OUTPUT

Explanation

The output jobs and data are being edited to tailor them. Edited JCL output was requested and no severe errors were encountered.

This message is issued by the following installation CLIST: DSNTINST

System action

The CLIST will continue.

Severity

0 (successful execution)

DSNT479I THE IRLM GROUP NAME AND DB2 GROUP NAME MUST BE DIFFERENT

Explanation

You entered an IRLM group name on panel DSNTIPJ that is the same as the Db2 group name entered on panel DSNTIPK. The names must be different.

This message is issued by the following panel: DSNTIPJ

System action

The panel is redisplayed and the cursor is placed on the field in error.

User response

Either change the Db2 group name entered on panel DSNTIPK or the IRLM group name on panel DSNTIPJ.

DSNT480I NAME MUST BE 1-16 CHARS, BEGIN WITH A-Z, AND NOT INCLUDE #, @, OR $.

Explanation

The location name specified on panel DSNTIPR is invalid. The location name must be 1-16 alphanumeric characters, excluding the alphabetic extenders #, @ or $, and must begin with a letter.

This message is issued by panel: DSNTIPR

System action

The panel is redisplayed and the cursor is placed on the field in error.

User response

Change the location name to meet the allowable criteria.

DSNT481I DSNTINST *data set* DATA SET SIZE MAY BE TOO SMALL

Explanation

The DSNTINST CLIST encountered an arithmetic overflow during calculation of this data set's size.

System action

DSNTINST continues processing and uses 2147483647 for the result of the calculation that caused the overflow. Thus, the size of the data set might be too small.

User response

Check the data set size in installation job DSNTIJIN. If it is too small, increase it.

DSNT482I TOO MANY CONCURRENTLY ALLOCATED DATA SETS, *opnds*

Explanation

The number (*opnds*) calculated for the number of concurrent databases, tables per database, and table spaces per database, is too large. The maximum number of data sets that are allowed is 100,000. See DSNT436I and DSNT437I for more information.

The number of concurrently allocated data sets is calculated using the formula:

```
OPNDS = (NUMCONDB X NUMTABLE X NUMINDEX) +
(NUMCONDB X NUMTABSP)
```

Where

Represents

NUMCONDB
The maximum number of concurrently active databases (DATABASES on panel DSNTIPE)

NUMTABLE
The estimated average number of tables per database (TABLES on panel DSNTIPD)

NUMINDEX
The estimated average number of indexes per table (set to 2)

NUMTABSP
The estimated average number of table spaces per database (TABLE SPACES on panel DSNTIPD)

This message is issued by the following installation CLIST: DSNTINST

System action

The CLIST reduces the value of NUMCONDB so that the calculated value for OPNDS is within the allowed range. CLIST processing continues.

User response

Do one of the following:

- Accept the reduced value for NUMCONDB calculated by the CLIST.
- Reenter smaller values for NUMCONDB, NUMTABLE, or NUMTABSP on the SIZES and STORAGE SIZES panels. You can do this by either using the END key to go back to those panels or by running the CLIST again.

Severity

4 (warning)

DSNT483I NAME MUST BE 1-8 CHARS AND MUST BEGIN WITH A-Z

Explanation

The Db2 data sharing group name specified on panel DSNTIPK or the IRLM data sharing group name specified on panel DSNTIPJ is invalid. The Db2 or IRLM group name must be 1-8 characters, and must begin with a letter.

This message is issued by panels: DSNTIPJ, DSNTIPK

System action

The panel is redisplayed and the cursor is placed on the field in error.

User response

Change the group name to meet the allowable criteria.

DSNT485I *type* SIZE = *size* K

Explanation

This is the estimated main storage size for part of the Db2 database address space. This is the most constrained address space. The *type* can be BUFFER POOL, SORT POOL SIZE, RID POOL SIZE, EDMPOOL STORAGE, DATA SET STORAGE, CODE STORAGE, or WORKING STORAGE.

The storage for buffer pools, sort pools, rid pools, EDMPOOL, and code is above the 16MB line. Most of the main storage for data set control blocks is below the 16MB line and is included in the region size. Working storage includes storage above and below the 16MB line, but storage above the line is not included in the region.

This message is issued by the following installation CLIST: DSNTINST

System action

The CLIST continues.

Severity

0 (successful execution)

Related concepts

Storage requirements for Db2 for z/OS (Db2 Installation and Migration)

The Db2 installation CLIST panel session (Db2 Installation and Migration)

Related tasks

Tailoring Db2 11 installation and migration jobs with the CLIST (Db2 Installation and Migration)

DSNT486I TOTAL MAIN STORAGE = *totregion* K

Explanation

This is the estimated total region size. It includes storage above the 16MB line.

This message is issued by the following installation CLIST: DSNTINST

System action

The CLIST continues.

Severity

0 (successful execution)

Related concepts

Storage requirements for Db2 for z/OS (Db2 Installation and Migration)

The Db2 installation CLIST panel session (Db2 Installation and Migration)

Related tasks

Tailoring Db2 11 installation and migration jobs with the CLIST (Db2 Installation and Migration)

DSNT487I TOTAL STORAGE BELOW 16MB = *region* K (ASSUMING SWA IS ABOVE THE LINE)

Explanation

This message provides an estimate of the virtual storage required below the 16MB line to check for virtual storage constraints. This calculation presumes that you have moved the SWA for Db2 above the 16MB line.

This message is issued by the following installation CLIST: DSNTINST

System action

The CLIST continues.

User response

Check for virtual storage constraints. Your MVS should permit at least this amount of virtual storage below the 16MB line.

Severity

0 (successful execution)

Related concepts

The Db2 installation CLIST panel session (Db2 Installation and Migration)

Related tasks

Calculating virtual storage below the 16-MB line (Db2 Installation and Migration)

Tailoring Db2 11 installation and migration jobs with the CLIST (Db2 Installation and Migration)

DSNT488I VOLUME voln WILL REQUIRE AT LEAST nn 4K BLOCKS

Explanation

This message states the number of 4KB blocks of space that will be required for the specified volume in order to install or migrate the current release of Db2.

Volume 'voln' is specified in the VOLUME SERIAL fields on installation panel DSNTIPA2, or with the VOLSDATn input parameters to the Install CLIST. The message indicates how much space will be needed on the selected volume to install or migrate this release of Db2.

This message is issued by the following installation CLIST: DSNTINST

System action

Processing continues.

User response

Ensure that the volume has at least as much available storage as the message indicates it should have. If it does not, rerun the INSTALL CLIST specifying different volumes, or create more available space on the originally specified volume.

In order to convert the number of 4KB blocks required to the number of cylinders required, use the table below. Divide the number of 4KB blocks (in the DSNT488I message) by the number of 4KB blocks per cylinder (in the table) to get the number of cylinders required.

Device Type	4KB Blocks per Cylinder	4KB Blocks per Track
3330	57	3
3340	24	2
3350	120	4
3375	96	8
3380	150	10

These size estimates are for system data only. They do not include: user data, archive logs, image copies, or temporary work data sets other than the temporary database.

Severity

0 (successful execution)

DSNT489I CLIST EDITING *dsname(member), explanation*

Explanation

The CLIST is editing the data set and member *dsname(member)*. The *explanation* is the type of data being edited and has one of these values:

INSTALL JCL
Jobs that are edited and run as directed during the installation process.

MIGRATE JCL
Jobs that are edited and run as directed only during the migration process.

FALL BACK JCL
A job that is only run as directed when falling back to the previous release.

RECOVERY JCL
A job that is only run as directed during a recovery process. It deletes the Db2 data sets.

SAMPLE JCL
Jobs that are edited and run during installation verification to add the sample application.

SAMPLE DATA
Edited data that installation verification jobs require.

CLIST
Customized CLISTs to reflect your names used during the installation process.

This message is issued by the following installation CLISTs:

DSNTINST DSNTINS1 DSNTINS2

System action

The CLIST continues.

Severity

0 (successful execution)

DSNT490I SAMPLE DATA UNLOAD PROGRAM

Explanation

This is the header, indicating a normal start for the application program.

DSNT491I TOO MANY TABLES ENTERED (MAXIMUM OF 100 TABLES)

Explanation

The number of tables entered for unloading exceeded the maximum of 100 tables. The first 100 tables in the input should have been processed.

System action

The application program is terminated.

User response

Split the run into multiple runs, none with more than 100 tables.

Problem determination

Check the application program input. Make sure there are no more than 100 tables.

DSNT492I SQL WARNING DURING SQL STATEMENT *statement-type*, TABLE *table-name*

Explanation

The SQL statement might not have executed correctly.

statement-type
The type of SQL statement that encountered the error: PREPARE, OPEN, FETCH, or CLOSE,

table-name
The name of the table or view that is being unloaded.

System action

The request might not be executed correctly.

User response

Take the action that is indicated by the return code for the SQL statement.

Problem determination

Determine which SQL statement in the application program caused the warning and see if it is reproducible. Follow the diagnosis approach suggested for the warning.

Related concepts
SQL codes (Db2 Codes)

DSNT493I SQL ERROR DURING SQL STATEMENT *statement-type*, TABLE *table-name*

Explanation

The SQL statement may not be executed correctly.

statement-type
The type of SQL statement that encountered the error: PREPARE, OPEN, FETCH, or CLOSE,

table-name
The name of the table or view that is being unloaded.

System action

The request was not executed correctly.

User response

Take the action that is indicated by the return code for the SQL statement.

Problem determination

Determine which SQL statement in the application program caused the error and try to reproduce the problem. Follow the diagnosis approach suggested for the SQL return code for that statement.

Related concepts
SQL codes (Db2 Codes)

DSNT494I ERROR DURING OPEN OF DDNAME SYSRECnn

Explanation

The ddname listed, where 'nn' ranges from 00 to 99, could not be successfully opened. A possible reason is that the DD statement to the data set was not present in the JCL.

System action

The application program is terminated.

User response

Check the JCL to ensure that this DD statement is provided and is able to be used for output.

Problem determination

Make sure that the same number of DD statements and table names were provided.

DSNT495I SUCCESSFUL UNLOAD n ROWS OF TABLE tttttttt

Explanation

The message indicates that 'n' rows of table or view 'tttttttt' were unloaded. The 'n' rows were counted during the unload processing.

System action

The request was executed successfully.

DSNT496I UNRECOGNIZED DATA TYPE CODE OF nnnnn

Explanation

The PREPARE returned an invalid data type code of decimal 'nnnnn'.

System action

The next table is processed.

System programmer response

See the Problem Determination section.

User response

Notify the system programmer.

Problem determination

There is an error in the unload program or a new data type has been added. The recognized data types are fullword integer, halfword integer, fixed-length character, variable length character, packed decimal, floating-point, fixed-length graphic, variable length graphic, and long, variable length graphic.

DSNT497I RETURN CODE FROM MESSAGE ROUTINE DSNTIAR

Explanation

The message formatting routine detected an error.

System action

The application program is terminated.

System programmer response

See the Problem Determination section.

User response

Notify the system programmer.

Problem determination

There is an error in the unload program. The return code from DSNTIAR is given in the MVS output of your job. When reporting this problem, have the return code, the application program listing, and JCL available.

DSNT498I ERROR, NO VALID COLUMNS FOUND

Explanation

The PREPARE returned data which did not produce a valid output record. The data was not recognized as valid, so the columns were not unloaded.

System action

The next table is processed.

System programmer response

See the Problem Determination section.

User response

Notify the system programmer.

Problem determination

There is an error in the unload program. When reporting this problem, have the application program listing and its JCL available.

DSNT499I ERROR IN INPUT PARAMETER LIST

Explanation

The parameter list that was specified when DSNTIAUL or DSNTEP2 was invoked contains one or more invalid values.

System action

The application program is terminated.

System programmer response

Check the parameter values entered when the program was invoked:

- For DSNTEP2, valid parameter values are:

– 'ALIGN(LHS)' or 'ALIGN(MID)'

  'ALIGN(LHS)' specifies that DSNTEP2 output is aligned on the left margin. 'ALIGN(MID)' specifies that DSNTEP2 output is centered.

– 'MIXED', or 'NOMIXED'

  'MIXED' specifies that DSNTEP2 recognizes mixed double-byte and single-byte character data. 'NOMIXED' specifies that DSNTEP2 does not recognize mixed double-byte and single-byte character data.

- For DSNTIAUL, the only valid parameter is 'SQL'.

  'SQL' specifies that input to DSNTIAUL is in the form of complete, semicolon-terminated SQL statements.

User response

Notify the system programmer.

Related reference

DSNTIAUL (Db2 Application programming and SQL)

DSNTEP2 and DSNTEP4 (Db2 Application programming and SQL)

DSNT500I ***csect-name*** **RESOURCE UNAVAILABLE REASON** ***reason-code*** **TYPE** ***resource-type*** **NAME** ***resource-name***

Explanation

The requested function requires a resource that is currently unavailable.

csect-name
The name of the control section that issued the message.

reason-code
The Db2 reason code value that indicates the reason for the failure. For explanations of reason codes, see Db2 reason codes (Db2 Codes).

resource-type **and** ***resource-name***
The type and name of the resource that the message identifies. For an explanation of *resource-type* and *resource-name* values, see Appendix C, “Resource types,” on page 1171.

System action

Additional messages and codes are issued to identify the system action and the action that should be taken by the installation or operator.

Operator response

Use the *reason-code*, *resource-type*, and *resource-name* values provided in the message to identify the source of the problem.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.

If *resource-type* is X'D00' or X'D01', use the following SQL statement to determine the table name:

```
SELECT CREATOR, NAME
   FROM SYSIBM.SYSTABLES
   WHERE DBID = dbid AND OBID = obid;
```

This statement can either fail or return an incorrect name if the table has been dropped.

Related concepts

Db2 reason codes (Db2 Codes)

Related information

Resource types

Type codes are associated with particular types of resources.

DSNT501I ***csect-name*** **RESOURCE UNAVAILABLE**

```
CORRELATION-ID = correlation-id
CONNECTION-ID  = connection-id
LUW-ID         = luw-id
REASON         = reason-code
TYPE           = resource-type
NAME           = resource-name
```

Explanation

The requested function requires a resource that is unavailable. This message is issued with other messages that identify the system action and the action that the installer or operator should take.

In some cases, Db2 can recover from this situation where a resource is not available and can complete successfully. One example is during the setup of a performance enhancement during bind time for execution time. If Db2 recovers successfully, no action is necessary.

correlation-id
The correlation identifier of the thread that is associated with the requester of the resource.

connection-id
The connection identifier of the requester.

luw-id
The logical-unit-of-work identifier (LUW-ID) of the thread that is associated with the requester of the resource. An asterisk (*) indicates that the thread does not have a LUW-ID. If the LUW-ID is not an asterisk, the value is a logical-unit-of-work-id that is assigned to the thread. This value is followed by an equal sign (=) and a token value, which can be used in place of logical-unit-of-work-id in any Db2 command that accepts logical-unit-of-work-id as input.

reason-code
The reason code that tells why the resource is unavailable.

resource-type* and *resource-name
The type and name of the resource that the message identifies. For an explanation of *resource-type* and *resource-name* values, see Appendix C, "Resource types," on page 1171.

For some situations, Db2 issues message DSNT501I one time and then suppresses it until the resource becomes available again. Examples include the following situations:

- For TYPE=905, REASON=00C90092, and NAME=IRLM, DSNTI501 is suppressed at the Db2 subsystem level until the IRLM out-of-storage condition is relieved.
- For REASON=00C90081.

Operator response

Note the values for *reason-code*, *resource-type*, and *resource-name*.

System programmer response

Look up the reason code for more information about why the resource was unavailable and possible actions to correct the problem. For example, if the reason code is 00C900A6, you must migrate the catalog to the current release. To do so, run DSNTIJTC.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.

Related tasks

Installation step 15: Tailor the Db2 catalog: DSNTIJTC (Db2 Installation and Migration)

Migration step 18: Tailor Db2 11 catalog: DSNTIJTC (Db2 Installation and Migration)

Populating the communications database for use with TCP/IP (Db2 Installation and Migration)

Populating the communications database (Db2 Installation and Migration)

Connecting systems with VTAM (Db2 Installation and Migration)

Related information

00C900A6 (Db2 Codes)

00C90081 (Db2 Codes)

00C90090 (Db2 Codes)

00C90092 (Db2 Codes)

Resource types
Type codes are associated with particular types of resources.

DSNT502I **ERROR IN DSNTIAUL SQL INPUT: *statement***

Explanation

The DSNTIAUL input SQL statement could not be prepared.

System action

The application program terminates.

System programmer response

Check that the DSNTIAUL input statement is a complete SQL statement, ending with a semicolon.

User response

Notify the system programmer.

DSNT503I **UNLOAD DATA SET *ddname* RECORD LENGTH SET TO *nnnnn*.**

Explanation

If the ddname is SYSRECnn, the record length specified in the JCL for the data set is not large enough to contain an entire row of unloaded data, or the record length was not specified in the JCL.

If the ddname is SYSPUNCH, the record length specified in the JCL is not between 80 and 255, or the record length was not specified in the JCL.

System action

Db2 sets the record length of the unload data set to the value specified in the message text.

DSNT504I **UNLOAD DATA SET *ddname* BLOCKSIZE SET TO *nnnnn*.**

Explanation

The block size for the SYSRECnn or SYSPUNCH data set was one of the following:

- Not specified in the JCL
- Set to zero in the JCL
- Less than the required record length
- Not an even multiple of the required record length

System action

Db2 sets the block size of the unload data set to the value specified in the message text.

DSNT505I DSNTIAUL OPTIONS USED: 'nnn'.

Explanation

You specified these options when you invoked DSNTIAUL. 'SQL' is the only valid option.

Severity

0 (informational)

DSNT506I INPUT STATEMENT WAS NOT A FULL SELECT ON A SINGLE TABLE. LOAD STATEMENT WILL NEED MODIFICATION.

Explanation

The SELECT statement used to request a table unload contained one of the following:

- A SELECT clause other than "SELECT * FROM"
- A FROM clause that does not contain exactly one table name

The table to be loaded is therefore not the same as the table from which the data is unloaded. DSNTIAUL is unable to determine the table name and all column names for the table to be loaded.

System action

DSNTIAUL generates a LOAD statement containing the string 'TBLNAME' for the table name. Some column names may be blank.

User response

Change the LOAD statement table name to the name of a table with the indicated column descriptions.

Severity

4 (warning)

DSNT507I *csect-name* RECORD LENGTH NEEDED IS GREATER THAN MAXIMUM ALLOWED FOR TABLE *table-name*

Explanation

In order to unload table *table-name*, Db2 needs an output data set with a record length greater than the system maximum of 32760 bytes. This occurs when the table to be unloaded is in a 32KB page table space and contains a combination of long columns and a number of date, time, or timestamp columns.

System action

The application program is terminated.

Severity

8 (error)

DSNT508I WARNING - NONSTANDARD JOB CARD (*cardstat*), NO JOB CARDS WILL BE ADDED TO THE EDITED JOBS

Explanation

The job card you entered in field 3 of panel DSNTIPY contains one or more of the following errors:

- Less than 7 characters ('cardstat' = TOO SHORT)
- "//" missing as the first 2 characters ('cardstat' = MISSING //)
- Missing the word "JOB" ('cardstat' = MISSING "JOB"TOKEN)

This message is issued by the following installation CLIST: DSNTINST

System action

The message is written to the screen, after all panels are displayed and before any job editing. No JCL is added to the edited jobs.

User response

You can continue with job editing and manually add JCL to the edited jobs. Alternatively, you can repeat the installation process and make corrections to the job card entered on panel DSNTIPY.

DSNT509I WARNING - MIGRATION INPUT MEMBER LEVEL IS *rel_ind*. LEVEL *prev_rel* IS REQUIRED. RETURN TO PANEL DSNTIPA1 TO CHANGE MIGRATION INPUT MEMBER

Explanation

The migration input member you entered on panel DSNTIPA1 contains incorrect release indicator 'rel_ind'. It should contain the indicator for the prior release ('prev_rel'). If your input member does not contain a release indicator, 'rel_ind' will be <null>. This probably indicates that you are using a down-level member.

This message is issued by the following installation CLIST: DSNTINST

System action

The message is written to the screen, after display of panel DSNTIPA1.

User response

Press ENTER to proceed to the next panel, and then PF3 to return to panel DSNTIPA1 in order to enter an input member with the correct release indicator.

DSNT510I **WARNING - INPUT MEMBER *inmem* LEVEL IS *rel_ind*. LEVEL *curr_rel* IS REQUIRED. RETURN TO PANEL DSNTIPA1 TO CHANGE INPUT MEMBER**

Explanation

The input member 'inmem' you entered in field 6 on panel DSNTIPA1 contains incorrect release indicator 'rel_ind'. It should contain the indicator for the current release ('curr_rel'). If your input member does not contain a release indicator, 'rel_ind' will be <null>. This probably indicates that you are using a down-level member.

This message is issued by the following installation CLIST: DSNTINST

System action

The message is written to the screen, after display of panel DSNTIPA1.

User response

Press ENTER to proceed to the next panel, and then PF3 to return to panel DSNTIPA1 in order to enter an input member with the correct release indicator.

DSNT511I **FIELDS 2 AND 5 MUST BE UNIQUE FOR EACH NEW MEMBER INSTALLED**

Explanation

This warning message is issued to remind you that the IRLM SUBSYSTEM and IRLM PROC names must be unique for each new member installed within a Db2 data sharing group. The installation process does not check for uniqueness of these names within a group.

This message is issued by the following panel: DSNTIPI

User response

Enter unique names in these fields for each member of a Db2 data sharing group.

DSNT512I **DSNT512I WARNING: ENTER UNIQUE NAMES FOR LUNAME AND LOCATION NAME**

Explanation

Panel DSNTIPR issues this message to remind you that you must enter values for DB2 LOCATION NAME and DB2 NETWORK LUNAME fields.

LUNAME is used to uniquely identify this Db2 subsystem within the network and to uniquely identify trace records for correlation of accounting records. The NETWORK LUNAME must be unique within the network. The installation process does not check for uniqueness of this name within a data sharing group.

The LOCATION NAME must be unique within the network, but must be the same on all members within a Db2 data sharing group.

User response

Enter unique names in these fields.

Related reference

DB2 LOCATION NAME field (Db2 Installation and Migration)

DB2 NETWORK LUNAME field (Db2 Installation and Migration)

DB2 GENERIC LUNAME field (Db2 Installation and Migration)

DSNT513I **THE RESYNC PORT FIELD MUST BE UNIQUE FOR EACH NEW MEMBER INSTALLED**

Explanation

This warning message is issued to remind you that the DB2 PROC NAME field on panel DSNTIPX or the RESYNC PORT field on panel DSNTIP5 must be unique for each new member installed within a Db2 data sharing group. The installation process does not check

for uniqueness of these values within a group. Panels DSNTIPX and DSNTIP5 issue this message.

User response

Enter unique values in these fields for each member of a Db2 data sharing group.

Related reference

DSNTIP5: Distributed data facility panel 2 (Db2 Installation and Migration)

DSNTIPX: Routine parameters panel (Db2 Installation and Migration)

DSNT514I FIELDS 2 AND 3 MUST BE UNIQUE FOR EACH NEW MEMBER INSTALLED

Explanation

This warning message is issued to remind you that the MEMBER NAME and WORK FILE DB NAME must be unique for each new member installed within a Db2 data sharing group. The installation process does not check for uniqueness of these names within a group.

This message is issued by the following panel: DSNTIPK

User response

Enter unique names in these fields for each member of a Db2 data sharing group.

DSNT515I THE *field-name* MUST BE UNIQUE FOR EACH NEW MEMBER INSTALLED

Explanation

This message indicates that the value specified for the of the *field-name* field must be unique for each new member installed within a Db2 data sharing group. The installation process does not check for uniqueness of these values within a group.

User response

Enter unique values in these fields for each member of a Db2 data sharing group.

DSNT516I FIELDS 1, 2, AND 4 MUST BE UNIQUE FOR EACH NEW MEMBER INSTALLED

Explanation

This warning message is issued to remind you that the SUBSYSTEM NAME, COMMAND PREFIX, and SUBSYSTEM SEQUENCE fields must be unique for each new member installed within a Db2 data sharing group. The installation process does not check for uniqueness of these values within a group.

This message is issued by the following panel: DSNTIPM

User response

Enter unique values in these fields for each member of a Db2 data sharing group.

DSNT517I CHARACTERS 2-18 MUST BE A-Z, 0-9, #, @, $, OR UNDERSCORE

Explanation

WLM environment names that do not meet the following criteria are not allowed. A WLM environment name may contain up to eighteen characters. The first character of a WLM environment name must either be an alphabetic character (A-Z) or a standard alphabetic extender (in the United States, the standard alphabetic extenders are '#', '@', '$'). For characters two through eighteen, a character may be an alphabetic character (A-Z), an alphabetic extender ('#', '@', '$'), a numeric character (0-9), or the underscore character ('_').

This message is issued by panel: DSNTIPX

System action

The panel is redisplayed, and the cursor is placed on the field with the error.

User response

Change the WLM environment name to meet the criteria described above.

DSNT518I THE VALUES FOR TCP/IP PORT PORT, SECURE PORT AND RESYNC PORT CANNOT BE THE SAME

Explanation

You entered the same value for DRDA PORT, SECURE PORT, and RESYNC PORT. The values for these fields must be different. This message is issued by the following panel: DSNTIP5

System action

The panel is redisplayed and the cursor is placed in the field in error.

User response

Change either the DRDA PORT, SECURE PORT, or the RESYNC PORT value so that they are different.

Related reference

DSNTIP5: Distributed data facility panel 2 (Db2 Installation and Migration)

DSNT519I TO SPECIFY A DRDA PORT OR A SECURE PORT (OR BOTH) YOU MUST ALSO SPECIFY A RESYNC PORT.

Explanation

You entered a value for DRDA PORT or SECURE PORT but not for RESYNC PORT, or, you entered a value for RESYNC PORT but did not enter a value for either DRDA PORT or SECURE PORT. When DRDA PORT, SECURE PORT, or both contain a non-blank, RESYNC PORT must also contain a non-blank.

This message is issued by the following panel: DSNTIP5

System action

The panel is redisplayed and the cursor is placed on the field in error.

User response

Enter values for DRDA PORT, SECURE PORT, or both, in conjunction with a value for RESYNC PORT. Or, remove all of the values from all of the port fields.

Related reference

DSNTIP5: Distributed data facility panel 2 (Db2 Installation and Migration)

DSNT526I WARNING: DSNHDECP SPECIFIES AN UNDEFINED (0) VALUE FOR *ccsid-parm* NOTIFY THE SYSTEM PROGRAMMER.

Explanation

The DSNHDECP module or user-supplied applications default module that is used by the Db2 precompiler contains an undefined (0) value for the CCSID parameter that is indicated by *ccsid-parm*. The use of CCSIDs that are undefined will be disallowed by Db2 in the near future.

System action

Processing continues.

System programmer response

The *dsnhdecp* module must specify a valid, non-zero default CCSID (coded character set identifier) for each of the three encoding schemes that are supported: ASCII, EBCDIC, and UNICODE. Processing character data with an undefined CCSID can lead to unpredictable results, including loss or corruption of the data. A default CCSID must be defined even for encoding schemes not used on your Db2 system.

If *ccsid-parm* is ASCCSID, then the default CCSID for single-byte ASCII-encoded character data is undefined (set to 0). If *ccsid-parm* is SCCSID, then the default CCSID for single-byte EBCDIC-encoded character data is undefined (set to 0).

You need to take steps now to select an appropriate CCSID for each undefined CCSID, and to plan for and schedule deployment of the updated *dsnhdecp* modules on your Db2 subsystem or data sharing system.

Do not attempt to choose or change a CCSID without guidance from IBM. Using the wrong CCSID can corrupt your data and render it unrecoverable.

User response

Notify the System Programmer.

DSNT527I ERROR: DB2 ATTEMPTED TO START USING THE DB2-SUPPLIED DSNHDECP MODULE. NOTIFY THE SYSTEM PROGRAMMER.

Explanation

The DSNHDECP module that is supplied by Db2 is being used to run the Db2 precompiler. Db2 requires site-dependent settings that are specified in the DSNHDECP module that was created when Db2 was installed. The DSNHDECP that was generated during installation typically is located in the SDSNEXIT library.

System action

Db2 startup is discontinued.

System programmer response

Check the STEPLIB, JOBLIB, or system link list concatenation used in the Db2 address spaces. To ensure that the proper DSNHDECP module is used, verify that the library that contains the DSNHDECP module that is generated during installation precedes the SDSNLOAD library that contains the DSNHDECP module that was supplied by Db2.

User response

Notify the System Programmer.

DSNT528I USE PROTECTION MUST BE YES WHEN CACHE DYNAMIC SQL IS YES

Explanation

You entered NO for USE PROTECTION on panel DSNTIPP and YES for CACHE DYNAMIC SQL on panel DSNTIP8. You must enter YES for USE PROTECTION if CACHE DYNAMIC SQL is YES.

System action

The panel is redisplayed, and the cursor is placed on the field that is in error.

User response

If you see this message on panel DSNTIPP, enter a value of YES for USE PROTECTION, or return to panel DSNTIP8 and enter NO for CACHE DYNAMIC SQL. If you see this message on panel DSNTIP8, enter a value of NO for CACHE DYNAMIC SQL, or go to panel DSNTIPP and enter YES for USE PROTECTION.

DSNT530I ***program-name*** **COULD NOT RUN BECAUSE IT WAS NOT INVOKED FROM AN APF-AUTHORIZED LIBRARY**

Explanation

program-name could not run for one of the following reasons:

- *program-name* was not invoked from an APF-authorized library.
- One or more libraries in the STEPLIB or JOBLIB concatenation the job that invokes *program-name* is not APF-authorized.

System action

The program terminates.

System programmer response

Ensure that *program-name* is link-edited with option AC(1) and resides in an APF-authorized library. Ensure that all libraries in the STEPLIB and JOBLIB concatenation for the job that invokes *program-name* are APF authorized. If *program-name* is an external module for a Db2 stored procedure or user-defined function, ensure that the corresponding SYSIBM.SYSROUTINES entry specifies a WLM-established address space.

User response

Notify the system programmer.

DSNT531I ***schema.routine-name*** **RECEIVED SQLCODE** ***sqlcode*** **FROM SQL STATEMENT** ***sql-statement***

Explanation

When *schema.routine-name* executed *sql-statement*, Db2 returned the SQL warning or error *sql-code*.

System action

schema.routine-name terminates.

System programmer response

Check the messages in the SYSPRINT data set for the stored procedures address space where routine *schema.routine-name* runs. A DSNT408I message provides specific information about the SQL warning or error.

User response

Notify the system programmer.

Related concepts
SQL codes (Db2 Codes)
Related information
DSNT408I
SQLCODE = -*sql-code*, *explanation*

DSNT532I ***schema.routine-name*** **RECEIVED SAF RETURN CODE** ***return-code*** **FROM RACROUTE COMMAND** ***command*****.**

Explanation

When *schema.routine-name* executed RACROUTE command *command*, the z/OS System Authorization Facility (SAF) returned an unexpected code *return-code*.

System action

schema.routine-name terminates.

System programmer response

Refer to the *z/OS Security Server RACROUTE Macro Reference* for more information about the SAF error.

User response

Notify the system programmer.

DSNT533I ***schema.routine-name*** **RECEIVED RETURN CODE** ***return-code*** **FROM MVS SERVICE** ***service-name*****, FUNCTION** ***function-name*****.**

Explanation

schema.routine-name executed MVS service *service-name* for function *function-name* and received an unexpected code *return-code*.

System action

schema.routine-name terminates.

System programmer response

Refer to the discussion of service *service-name* in the *z/OS MVS Programming: Authorized Assembler Services Reference Volumes 1-4* for assistance with diagnosing the error.

User response

Notify the system programmer.

DSNT534I ***schema.routine-name*** **RECEIVED AN ALERT FROM THE EXTENDED MCS CONSOLE:** ***alert-type*****.**

Explanation

schema.routine-name has activated an extended MCS console to monitor system messages. This console has posted an alert as indicated by *alert-type*.

System action

schema.routine-name terminates.

System programmer response

If *routine-name* is the Db2-supplied stored procedure WLM_REFRESH then this message indicates an error in program DSNTWR. Refer to the *z/OS MVS Programming: Authorized Assembler Services Guide*, the subtopic entitled "What to Do if Message Queuing Stops in the discussion of What Is an Extended MCS Console?" for help. If this information does not help you, contact IBM for assistance.

User response

Notify the system programmer.

DSNT537I ***csect-name*** **REAL-TIME STATISTICS EXTERNALIZATION HAS BEEN** ***action-text***

Explanation

The status of or a change in the externalization of real-time statistics as indicated by *action-text*.

csect-name
The name of the control section that issued the message.

action-text
Indicates the current status of the externalization of real-time statistics. *action-text* is one of the following:

ENABLED
Real-time statistics externalization is enabled and externalization takes place at the next interval.

DISABLED
Real-time statistics externalization is disabled and will not take place again until it is enabled.

System action

Processing continues.

Related concepts

When Db2 externalizes real-time statistics (Db2 Performance)

DSNT540I ***wlm-environment-name*** **WAS REFRESHED BY** ***user*** **USING AUTHORITY FROM SQL ID** ***sqlid***

Explanation

Db2 stored procedure WLM_REFRESH refreshed WLM environment *wlm-environment-name*. User ID *user* issued the request, using authority from SQL ID *sqlid*.

System action

WLM environment *wlm-environment-name* is refreshed.

System programmer response

None

User response

None

DSNT541I **WLM REFRESH REQUEST FAILED. RESOURCE PROFILE** ***subsystem-name*****.WLM_REFRESH.*****wlm-environment-name*** **IS UNDEFINED**

Explanation

Db2 stored procedure WLM_REFRESH rejected a request to refresh WLM environment *wlm-environment-name* because SAF resource profile *subsystem-name*.WLM_REFRESH.*wlm-environment-name* does not exist. WLM_REFRESH uses the resource profile to verify whether the requestor is

authorized to refresh the WLM environment. The requestor was connected to Db2 subsystem *subsystem-name*.

System action

WLM_REFRESH rejects the refresh request.

System programmer response

Create the SAF resource profile in resource class DSNR, and permit READ access to all primary and secondary authorization IDs that need to refresh the WLM environment.

User response

Notify the system programmer.

DSNT542I **SQL ID *sqlid* IS NOT AUTHORIZED TO REFRESH WLM ENVIRONMENT *wlm-environment-name***

Explanation

Db2 stored procedure WLM_REFRESH rejected a request to refresh WLM environment *wlm-environment-name* because *sqlid* is not authorized. *sqlid* is the current SQLID of the requestor.

System action

WLM_REFRESH rejects the refresh request.

System programmer response

Give *sqlid* READ access or higher on the appropriate SAF resource profile. That profile resides in SAF resource class DSNR and has the format *ssid*.WLM_REFRESH.*wlm-environment-name*.

User response

Notify the system programmer.

DSNT543I **WLM REFRESH REQUEST FAILED: PARAMETER *parameter* IS NULL, BLANK, OR CONTAINS INVALID CHARACTERS**

Explanation

The argument passed to WLM_REFRESH for *parameter* cannot be used for one of the following reasons:

- It is null or blank
- It contains characters that are not allowed for a SAF resource profile or for a Db2 subsystem name

System action

The program terminates.

System programmer response

- For the WLM_ENV_NAME parameter, specify a non-null, non-blank argument. That argument must conform to the rules for a SAF resource profile.
- For the SSID parameter, specify a null or blank argument, or a value that conforms to the rules for a Db2 subsystem name. If you specify a null or blank value, Db2 determines the subsystem name.

User response

Notify the system programmer.

Related reference

Db2 administration routines panel: DSNTIPRL (Db2 Installation and Migration)

SUBSYSTEM NAME field (SSID DECP value) (Db2 Installation and Migration)

WLM_REFRESH stored procedure (Db2 SQL)

DSNT544I **SQLID *sqlid* IS UNDEFINED OR *user* IS NOT PERMITTED TO USE IT TO REFRESH *wlm-environment-name***

Explanation

Db2 stored procedure WLM_REFRESH rejected a request by user id *user* to refresh WLM environment *wlm-environment-name* using authorization id *sqlid*. The request was denied either because *sqlid* does not exist or because *user* is not permitted to use it.

System action

WLM_REFRESH rejects the refresh request.

System programmer response

If *sqlid* exists, permit *user* to use it. Otherwise, create *sqlid*, give it READ access or higher on the appropriate SAF resource profile (which resides in SAF resource class DSNR and has the format *ssid*.WLM_REFRESH.*wlm-environment-name*), and permit *user* to use it.

User response

Notify the system programmer.

DSNT545I **WLM REFRESH REQUEST FAILED BECAUSE OF AN UNEXPECTED SYSTEM MESSAGE WITH IDENTIFIER *message-identifier***

Explanation

The system has denied a WLM refresh request passed by Db2 stored procedure WLM_REFRESH. *message-identifier* is the identifier of a system message that was issued when the request failed.

System action

The refresh request is denied.

System programmer response

Examine the system log in the vicinity of the failed refresh request and locate message identifier *message-identifier*. Use this message and related messages to diagnose and correct the problem that is preventing the WLM refresh request.

User response

Notify the system programmer.

DSNT546I **WLM REFRESH REQUEST CANCELLED BECAUSE AN EXTENDED MCS CONSOLE COULD NOT BE ACTIVATED WITHIN *n* SECONDS**

Explanation

Db2 stored procedure WLM_REFRESH rejected a request because it was unable to activate an extended MCS console within the allowed period of *n* seconds. The extended MCS console serializes the WLM_REFRESH requests and verifies that z/OS completed the refresh request.

System action

WLM_REFRESH rejects the refresh request.

System programmer response

This message indicates that WLM_REFRESH is busy processing one or more previous requests. Issue the Db2 command `-DIS PROC(SYSPROC.WLM_REFRESH)` and examine the ACTIVE, QUEUED, and MAXQUE values to analyze whether or not a large backlog of calls to WLM_REFRESH currently exists. To give WLM_REFRESH more time to respond to these requests, you can increase the wait time by updating the setting of the WAITLMT constant in the source code of the external module for WLM_REFRESH, DSNTWR. You need to prepare and bind DSNTWR again for the change to take effect.

User response

If you receive DSNT456I from subsequent calls to WLM_REFRESH, notify the system programmer.

DSNT547I **THE RESULT OF THE WLM REFRESH REQUEST IS UNKNOWN BECAUSE THE SYSTEM DID NOT REPLY WITHIN *n* SECONDS**

Explanation

The Db2-supplied stored procedure, WLM_REFRESH, accepted and validated the request to refresh a WLM environment and passed it to z/OS for processing. However, z/OS did not respond within the wait period of *n* seconds.

System action

WLM_REFRESH terminates with return code 4.

System programmer response

This message indicates that your system is suppressing one or more of the messages that can be generated in response to the VARY WLM command. DSNTWR, the external module for WLM_REFRESH, uses an extended MCS console (also named DSNTWR) to monitor whether or not the VARY WLM command succeeded or failed. Messages with the IDs IWM032I (refresh complete) and IWM031I (refresh in progress) indicate that the refresh request processed successfully. So, for WLM_REFRESH to function correctly, you need to ensure that the system does not suppress messages IWM031I and IWM032I.

This error can also occur if the specified WLM environment requires more than *n* seconds to refresh. In this case, you need to increase the wait time allowed for the reply by updating the setting of the WAITLMT constant in the source code of the external module for WLM_REFRESH, DSNTWR. You need to prepare and bind DSNTWR again for the change to take effect.

User response

Notify the system programmer.

DSNT548I ***calling-program-name* LOAD MODULE NAME *called-module-name* NOT FOUND, BLDL R15=*return-code*, R0=*reason-code***

Explanation

A program invoked the DFSMS BLDL macro to build a directory entry list for invoking a load module. The load module was not found.

calling-program-name
The name of the program that calls the DFSMS BLDL macro in preparation for linking or attaching the program that is specified by *called-module-name*.

called-module-name
The name of the load module for which the program that is specified by *calling-program-name* calls the BLDL macro.

return-code
The return code from the BLDL macro invocation.

reason-code
The reason code from the BLDL macro invocation.

System action

The calling program terminates.

System programmer response

Verify that the called module exists, and that the calling program can access it.

User response

Notify the system programmer.

Related information

BLDL completion codes (DFSMS Macro Instructions for Data Sets)

DSNT550I ***'data-set-name'* IS UNAVAILABLE FOR CLIST OUTPUT BECAUSE *reason***

Explanation

Data set *data-set-name* is required for output by the Db2 Install CLIST, but cannot be allocated for the reason that is indicated by *reason*. Possible reasons are:

- IT CANNOT BE ALLOCATED OR OPENED FOR OUTPUT

  An error occurred during an allocate, open, or close operation on *data-set-name.*
- ERROR PROCESSING REQUESTED DATA SET

  The request for *data-set-name* could not be processed.
- MEMBER SPECIFIED, BUT DATASET IS NOT PARTITIONED

  data-set-name already exists, but is not a partitioned data set as required by the CLIST.
- PROTECTED DATASET

  Your userid is not authorized to use *data-set-name*.
- VOLUME NOT ON SYSTEM

  data-set-name is registered in the system catalog on a DASD or tape volume which is currently unmounted or unavailable.
- UNAVAILABLE DATASET

  data-set-name is currently allocated by another user.

System action

The Install panel for specifying *data-set-name* is redisplayed. You cannot proceed to the next Db2 Install panel until the problem is resolved.

User response

Take one of the following actions according to *reason*:

- For errors allocating, opening, or processing *data-set-name*, specific diagnostic messages are displayed by TSO. If you are not seeing these messages, enter the command TSO PROFILE WTPMSG in the command line of the current Db2 installation panel. Consult the appropriate MVS system messages and codes manual for further information about these messages.
- If *data-set-name* is indicated as a non-partitioned data set, verify that you have entered the intended data set name for CLIST output. If so, rename or delete the existing data set.
- Consult your system security administrator to obtain access to a protected data set.
- In the event of an unavailable data set, ask the current user(s) to release it. Ask your system programmer to identify the user(s) if you are unable to do so. Otherwise, try later when the data set has been freed.

DSNT551I ***csect-name bind-type* FOR *object-type* = *object-name* FAILED BECAUSE CHARACTER CONVERSION FROM CCSID *from-ccsid* TO CCSID *to-ccsid* FAILED WITH ERROR CODE *error-code* FOR TABLE *dbid.obid* COLUMN *column-number*.**

Explanation

A conversion error occurred during the conversion of a string to a different coded character set.

bind-type
identifies the type of bind subcommand: BIND, REBIND or FREE.

object-type
identifies the type of object being bound: PLAN or PACKAGE

object-name
if '*object-type*' is PLAN, '*object-name*' is the name of the plan.

if '*object-type*' is PACKAGE, '*object-name*' is the name of the package in '*location-id.collection-id.package-id*'.

from-ccsid
identifies the coded character set of the string to be converted.

to-ccsid
identifies the coded character set to which it must be converted.

error-code
indicates the type of error as defined as follows:

8
Length exception (for example, expansion required for PC MIXED data exceeds the maximum length of the string).

12
Invalid code point.

16
Form exception (for example, invalid MIXED data).

20
Conversion procedure error (for example, an error during Unicode/390 stage 2 conversions or an exit set the length control field of the string to an invalid value).

24
The conversion services have not been setup correctly or the conversion is not supported.

dbid.obid
gives the database id and the table obid of the object with the conversion error. This could be either the target or the source of the conversion.

column-number
gives the column number of the failing object. This could be either the target or the source of the conversion.

System action

The *bind-type* operation is not performed.

User response

If the *error-code* value is 24 and the conversion request is correct, check whether conversion support is correctly enabled.

For all other *error-code* values, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Severity

8

Related concepts
Introduction to character conversion (Db2 Internationalization Guide)
Related tasks
Setting up Db2 to ensure that it interprets characters correctly (Db2 Internationalization Guide)

DSNT552I ***csect-name*** **CHARACTER CONVERSION FROM CCSID** ***source-ccsid*** **TO CCSID** ***target-ccsid*** **FAILED WITH ERROR CODE** ***error-code***

Explanation

A conversion error occurred during the conversion of a string to a different coded character set.

source-ccsid
The coded character set of the string to be converted.

target-ccsid
The coded character set that the string is to be converted to.

error-code
The type of error :

8
Length exception (for example, expansion required for PC MIXED data exceeds the maximum length of the string).

12
Invalid code point.

16
Form exception (for example, invalid MIXED data).

20
Conversion procedure error (for example, an error during Unicode/390 stage 2 conversions or an exit set the length control field of the string to an invalid value).

24
The conversion services have not been setup correctly or the conversion is not supported.

28
Either inconsistent data (for example, as a string length less than 0) was provided or

Unicode System Services issued an invalid return code.

System action

The operation is not performed.

User response

Use the MVS command D UNI,ALL to see the conversions that have been defined.

If the *error-code* value is 24 and the conversion request is correct, check whether conversion support is correctly enabled.

For all other *error-code* values, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Severity

8 (error)

Related concepts

Introduction to character conversion (Db2 Internationalization Guide)

Related tasks

Setting up Db2 to ensure that it interprets characters correctly (Db2 Internationalization Guide)

DSNT555I EXCESS *ts-type* PRIMARY SPACE HAS BEEN LOWERED FROM *specified-space* MB TO *adjusted-space* MB

Explanation

This message displays on installation panel DSNTIP9, WORK FILE DATABASE, if the amount of space specified for the type of work file table space, when divided by the number of such table spaces, exceeds the system limit.

ts-type
The type of work file table space. Expected values are 4K SORT, 32K SORT, 4K TEMP, or 32K TEMP.

specified-space
The amount of primary space (in megabytes) that is specified for the indicated type of work file table space.

adjusted-space
The recalculated amount of primary space (in megabytes) for the indicated type of work file table space.

This message displays separately for each type of work file table space.

System action

The installation CLIST automatically reduces the specified total space to the indicated size.

User response

To accept the adjusted size and continue, press Enter.

To specify a different adjustment, change the amount of space, the number of table spaces, or both. The adjusted calculation must comply with the following requirement:

```
specified-space / ts-count < 64
```

Where:

specified-space
The value indicated in the message.

ts-count
The number of table spaces of the type indicated in the message by *ts-type*.

max-size
The maximum size for the type of work file table space indicated in the message, specified in gigabytes.

- 4K SORT: 64 GB
- 32K SORT: 64 GB
- 4K TEMP: 16384 GB (16 TB)
- 32K TEMP: 131072 GB (128 TB)

Related reference

DSNTIP9: Work file database panel (Db2 Installation and Migration)

DSNT556I THE SUM OF 4K SORT WORK TS'S, 32K SORT WORK TS'S, 4K TEMP WORK TS'S AND 32K TEMP WORK TS'S CANNOT EXCEED 500

Explanation

This message displays on installation panel DSNTIP9 when the sum of the values entered for the different types of work file databases exceeds 500, which is the maximum number of table spaces permitted in the work file database.

System action

Panel DSNTIP9 is displayed again, and the cursor is placed in the 4K SORT WORK TS'S field.

User response

Reduce the total number of table spaces specified in the following fields so that the sum of all of these fields does not exceed 500:

- 4K SORT WORK TS'S
- 32K SORT WORK TS'S
- 4K TEMP WORK TS'S
- 32K TEMP WORK TS'S

Related reference

DSNTIP9: Work file database panel (Db2 Installation and Migration)

DSNT557I ***ts-type*** **WORK TS'S MUST BE GREATER THAN 0 WHEN** ***ts-type*** **PRIMARY SPACE IS GREATER THAN 0**

Explanation

This message displays on installation panel DSNTIP9, WORK FILE DATABASE, if the PRIMARY SPACE value for a type of work file table space is non-zero and the corresponding WORK TS'S value is 0. When a non-zero value is specified for a primary space, then a non-zero value is required for the corresponding work file table space option.

ts-type
The type of work file table space. Expected values are 4K SORT, 32K SORT, 4K TEMP, or 32K TEMP.

System action

Panel DSNTIP9 is displayed again, and the cursor is placed in the *ts-type* PRIMARY SPACE field.

Programmer response

Either reduce the *ts-type* PRIMARY SPACE value to 0 or enter a non-zero value for the corresponding WORK TS'S entry. Reducing the PRIMARY SPACE value prevents the creation of additional work file table spaces of the indicated type as part of the migration process.

Related reference

DSNTIP9: Work file database panel (Db2 Installation and Migration)

DSNT558I ***ts-type*** **PRIMARY SPACE MUST BE GREATER THAN 0 WHEN TEMP** ***ts-type*** **WORK TS'S IS GREATER THAN 0**

Explanation

This message displays on installation panel DSNTIP9, WORK FILE DATABASE, if the WORK TS'S value for a type of work file table space is non-zero and the corresponding PRIMARY SPACE value is 0. When a non-zero value is specified for a work file table space, then a non-zero value is required for the corresponding primary space option.

ts-type
The type of work file table space. Expected values are 4K SORT, 32K SORT, 4K TEMP, or 32K TEMP.

System action

Panel DSNTIP9 is displayed again, and the cursor is placed in the *ts-type* PRIMARY SPACE field.

Programmer response

Either reduce the *ts-type* WORK TS'S value to 0 or enter a non-zero value for the corresponding PRIMARY SPACE entry. Reducing the WORK TS'S value prevents the creation of additional work file table spaces of the indicated type as part of the migration process.

Related reference

DSNTIP9: Work file database panel (Db2 Installation and Migration)

DSNT560I **ENTRY IS NOT A VALID** ***entry-type***

Explanation

The entry in the indicated ISPF field has a syntax or other unexpected format that does not meet the requirements for a valid entry.

entry-type
The type of entry, such as ROLE or WLM ENVIRONMENT NAME.

System action

The panel displays again, with the cursor on the field that contains the invalid entry.

User response

Correct the entry in the indicated field.

DSNT561I **LOCKS PER TABLE(SPACE) MUST BE LESS THAN LOCKS PER USER**

Explanation

The current entry in the LOCKS PER TABLE(SPACE) field is greater than or equal to the value in the LOCKS PER USER field, which is not permitted.

System action

The panel displays again, with the cursor on the field that contains the invalid entry.

User response:
Enter a value in the LOCKS PER TABLE(SPACE) field that is less than the value for LOCKS PER USER.

DSNT562I **A ROLE NAME FOR SECURITY ADMIN *field-indicator* CANNOT BEGIN WITH 'SYS' AND CANNOT BE 'ACCESSCTRL', 'DATAACCESS', 'DBADM', 'DBCTRL', 'DBMAINT', 'NONE', 'NULL', 'PACKADM', 'PUBLIC', 'SECADM', or 'SQLADM'**

Explanation

The specified ROLE name is invalid because it starts with "SYS" or is one of the restricted values listed in the message text.

field-indicator
An indicator of which field the message refers to: 1 or 2.

This check is performed only if ROLE in entered in the SEC ADMIN *field-indicator* TYPE field.

System action

The panel displays again, with the cursor on the field that contains the invalid entry.

User response

Change the value in the SECURITY ADMIN *field-indicator* field to comply with the rules for a ROLE name for a Db2 security administrator. If the entry is an authorization ID rather than a role, change the entry in the SEC ADMIN *field-indicator* TYPE field to AUTHID.

DSNT563I **AN ENTRY IN *nonblank-field* REQUIRES AN ENTRY IN *blank-field***

Explanation

The indicated installation panel fields must both contain either blank or nonblank values, but only one has a nonblank value.

nonblank-field
The installation panel field that currently contains a nonblank value.

blank-field
The installation panel field that currently contains a blank value.

System action

The installation panel displays again, with the cursor positioned in the field that is indicated by *nonblank-field*.

User response

Either enter blanks in the field that is indicated by *nonblank-field*, or enter a nonblank value in the field that is indicated by *blank-field*.

DSNT564I **THE ENTRY IN *first-field* CANNOT BE THE SAME AS THE ENTRY IN *second-field***

Explanation

Two installation panel fields that must have unique values have the same nonblank values.

first-field* and *second-field
The installation panel fields that currently contain the same values.

System action

The installation panel displays again, with the cursor positioned in the field that is indicated by *first-field*.

User response

Update either or both of the indicated the fields so that their values are unique. Some fields can coexist with blank values in both. Review the installation panel information for requirements.

Related tasks
Tailoring Db2 11 installation and migration jobs with the CLIST (Db2 Installation and Migration)

DSNT566I **AN ENTRY OF *value-1* IN *field-1* REQUIRES AN ENTRY OF *value-2* IN *field-2***

Explanation

To specify a value of *value-1* in field *field-1*, you must first specify a value of *value-2* in field *field-2*.

value-1
The setting specified in field *field-1*.

field-1
The name of the installation panel field that currently contains a value that is dependent on the value specified in installation panel field *field-2*.

value-2
The setting specified in field *field-2*.

field-2
The name of the installation panel field that field *field-1* is dependent upon.

System action

The installation panel displays again. The cursor is positioned in the field that contains the dependent value.

Administrator response

Either specify *value-2* in *field-1* or specify *value-1* in *field-2*.

Severity

8 (error)

DSNT568I SAVE REQUEST IGNORED BECAUSE NO OUTPUT MEMBER WAS SPECIFIED

Explanation

A SAVE request was entered in the command line of the current Db2 installation panel but the change cannot be honored because no output member was specified in the OUTPUT MEMBER NAME field on the main panel, DSNTIPA1.

System action

The request is ignored.

User response

To continue to the next panel, press ENTER.

To exit the CLIST without saving your changes, press RETURN. Any changes that you have made will be lost. Then rerun the CLIST and specify an output member name on panel DSNTIPA1.

Related reference

DSNTIPA1 or DSNTILA1: Main panel (Db2 Installation and Migration)

DSNT569I CHANGES HAVE BEEN SAVED TO OUTPUT MEMBER *member-name*

Explanation

Db2 installation changes have been saved.

member-name
The output member where the changes were saved.

System action

If the Save and continue option was selected, processing continues. Otherwise, the installation CLIST returns to the main panel.

User response

No action is required.

Related concepts

The Db2 installation CLIST panel session (Db2 Installation and Migration)

Related tasks

Tailoring Db2 11 installation and migration jobs with the CLIST (Db2 Installation and Migration)

Related reference

DSNTIPA1 or DSNTILA1: Main panel (Db2 Installation and Migration)

DSNT570I WARNING: THIS APPLICATION HAS SELECTED DSNTIAR TO PERFORM SQL MESSAGE FORMATTING BECAUSE THE GET DIAGNOSTICS SERVICE RETURNED AN UNEXPECTED SQLCODE WHILE FORMATTING MESSAGES FOR ONE OR MORE SQL WARNING OR ERROR CONDITIONS. A DUMP OF THE SQLCA FOR THE GET DIAGNOSTICS REQUEST FOLLOWS:

```
SQLCODE:  sqlcode
  SQLSTATE: sqlstate
  SQLERRP:  sqlerrp

SQLERRMC: sqlerrmc

SQLERRD1: sqlerrd1
  SQLERRD2: sqlerrd2
  SQLERRD3: sqlerrd3

SQLERRD4: sqlerrd4
  SQLERRD5: sqlerrd5
  SQLERRD6: sqlerrd6

SQLWARN0: w0 1: w1 2: w2
  3: w3 4: w4
  5: w5 6: w6
  7: w7 8: w8
  9: w9 A:wA
```

The dump of the SQLCA is shown here on multiple lines because of space limitations. The empty lines here indicate the correct line breaks.

Explanation

The application program called the GET DIAGNOSTICS service to format one or more of the warning or error conditions that occurred during the processing of the current SQL statement that was input into the system. However, the GET DIAGNOSTICS service also returned warnings or errors, as indicated by the SQLCA dump. The application therefore will use the DSNTIAR message formatting service instead of GET DIAGNOSTICS. **Attention:** Messages formatted by DSNTIAR might contain truncated tokens. Also, when

multiple unexpected SQLCODEs were returned for the current inputted SQL statement, DSNTIAR reports on the first one.

System action

The application program continues.

System programmer response

See the problem determination section of this message.

User response

Notify the system programmer.

Problem determination

Use the SQLCA dump provided by DSNT570I to determine the cause of the problem. After the problem is resolved, run the application again.

DSNT571I **ERROR: THIS APPLICATION IS TERMINATING BECAUSE THE GET DIAGNOSTICS SERVICE RETURNED AN UNEXPECTED SQLCODE WHILE FORMATTING MESSAGES FOR ONE OR MORE SQL WARNING OR ERROR CONDITIONS FROM A ROWSET FETCH STATEMENT OR A NON-ATOMIC STATEMENT. A DUMP OF THE SQLCA FOR THE GET DIAGNOSTICS REQUEST FOLLOWS:**

```
SQLCODE:  sqlcode
  SQLSTATE: sqlstate
  SQLERRP:  sqlerrp

SQLERRMC: sqlerrmc

SQLERRD1: sqlerrd1
  SQLERRD2: sqlerrd2
  SQLERRD3: sqlerrd3

SQLERRD4: sqlerrd4
  SQLERRD5: sqlerrd5
  SQLERRD6: sqlerrd6

SQLWARN0: w0 1: w1 2: w2
  3: w3 4: w4
  5: w5 6: w6
  7: w7 8: w8
  9: w9 A:wA
```

The dump of the SQLCA is shown here on multiple lines because of space limitations. The empty lines here indicate the correct line breaks.

Explanation

The application program called the GET DIAGNOSTICS service to format one or more of the warning or error conditions that occurred during the processing of a ROWSET FETCH statement or a non-atomic statement. However, the GET DIAGNOSTICS request failed. Since the severity of the original warning or error conditions cannot be determined, the application terminates after reporting this error.

System action

The application program is terminated.

User response

Notify the system programmer.

Problem determination

Use the SQLCA dump provided by DSNT571I to determine the cause of the problem. After the problem is resolved, run the application again.

DSNT601I **THE DESCRIPTOR FOR *object-type object-name* DOES NOT EXIST IN DBD01**

Explanation

An object that is defined in the Db2 catalog does not have a corresponding descriptor in the DBD01 table space of database DSNDB01.

object-type
The type of object, either DATABASE or SPACE. A value of SPACE can refer to either a table space or an index space.

object-name
The eight character name of the database, table space, or index space.

Possible causes for this error include:

- The Db2 catalog and the directory tablespace DSNDB01.DBD01 are out of sync.
- The DBD01 table space was not completely restored during a recovery process.
- There is a Db2 logic error.

System action

Processing continues.

System programmer response

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

DSNT602I **NO SPACES FOUND**

Explanation

No spaces were found that satisfied the request of the DISPLAY DATABASE command with the SPACENAM option. The value for SPACENAME might be a range, a subset, or a list of spaces.

System action

The request is rejected.

User response:
Specify a valid value for SPACENAM and reissue the DISPLAY DATABASE command.

Related reference

-DISPLAY DATABASE (Db2) (Db2 Commands)

DSNT603I ***spacetype name* NOT *type***

Explanation

In the DISPLAY DATABASE command, no table space or index space that is listed in the SPACENAM option satisfies the type of request.

spacetype
One of the following values to indicate the type of space:

TABLESPACE
Table space

INDEXSPACE
Index space

name
The name of the space.

type
One of the following character strings to indicate the type of request that was specified.

ACTIVE
The ACTIVE option was specified on the DISPLAY DATABASE command.

RESTRICTED
The RESTRICT option was specified on the DISPLAY DATABASE command.

ACTIVE OR RESTRICTED
Both the ACTIVE option and the RESTRICT option were specified on the DISPLAY DATABASE command.

System action

Message DSNT301I or DSNT302I is displayed if no object is found and the keywords ACTIVE and RESTRICT are omitted.

User response

No action is required.

Related reference

-DISPLAY DATABASE (Db2) (Db2 Commands)

DSNT604I NO INFORMATION AVAILABLE

Explanation

The DISPLAY DATABASE command was issued with the LOCKS option, USE option or both, but no lock or user information is available.

Depending on the options that were specified in the DISPLAY DATABASE command, the extent of unavailable information is as follows:

- If the SPACENAM option was specified with a list of spaces, this message indicates that no table spaces or index spaces whose names are listed have LOCK or USE information available.
- If the SPACENAM option was specified with a range or a subset of spaces, this message indicates that no table spaces and index spaces within the specified database have LOCK or USE information available.
- If the SPACENAM option was not specified or SPACENAM(*) was specified and a range or subset of databases was specified, this message indicates that no databases, for which the invoker has authority to display, have LOCK or USE information available.

User response

No action is required.

Related reference

-DISPLAY DATABASE (Db2) (Db2 Commands)

DSNT694I DATABASE name CANNOT BE STOPPED. IT CONTAINS THE DDL REGISTRATION TABLES

Explanation

The database specified in the message cannot be stopped because it contains the application and object registration tables. Installation SYSADM or installation SYSOPR authority is needed to stop the database.

System action

The database specified in the message is not stopped.

User response

Reissue the command with the proper authority.

DSNT695I TABLESPACE name CANNOT BE STOPPED. IT CONTAINS A DDL REGISTRATION TABLE

Explanation

The table space specified in the message cannot be stopped because it contains an application or object registration table. Installation SYSADM or installation SYSOPR authority is needed to stop the table space.

System action

The table space specified in the message is not stopped.

User response

Reissue the command with the proper authority.

DSNT696I INDEXSPACE name CANNOT BE STOPPED. IT IS DEFINED ON A DDL REGISTRATION TABLE

Explanation

The index space specified in the message cannot be stopped because it is defined on an application or object registration table. Installation SYSADM or installation SYSOPR authority is needed to stop the index space.

System action

The index space specified in the message is not stopped.

User response

Reissue the command with the proper authority.

DSNT700I *table-name* IS THE ACTIVE RESOURCE LIMIT SPECIFICATION TABLE

Explanation

This message displays output from the DISPLAY RLIMIT command. This command reports the status of the resource limit facility (RLF), which is sometimes called the governor.

The output includes one of the following messages:

DSNT700I - Active
This message is displayed if the governor is active.

DSNT701I - Not active
This message is displayed if the governor is not active.

The DISPLAY RLIMIT command ends with message DSN9022I - Normal completion .

DSNT700I - Active

Message DSNT700I indicates that the governor is active.

```
DSNT700I table-name IS THE ACTIVE RESOURCE
LIMIT SPECIFICATION TABLE
```

table-name is the table that the governor is using to determine resource limits.

If you want the governor to use a different resource limit specification table, issue the START RLIMIT command and specify the ID of the table.

If you do not want the governor to be active, issue the STOP RLIMIT command.

DSNT701I - Not active

Message DSNT701I indicates that the governor is not active.

```
DSNT701I RESOURCE LIMIT FACILITY IS INACTIVE
```

If you want the governor to be active, issue the START RLIMIT command and specify the ID of the resource limit specification table to be used.

DSN9022I - Normal completion

When the DISPLAY RLIMIT command ends normally, message DSN9022I is issued.

```
DSN9022I = DSNTCDIS 'DISPLAY RLIMIT' NORMAL
COMPLETION
```

System action

Processing continues.

Related reference
-DISPLAY RLIMIT (Db2) (Db2 Commands)
-START RLIMIT (Db2) (Db2 Commands)
-STOP RLIMIT (Db2) (Db2 Commands)
Related information
DSN9022I
csect-name '*verb-namepkw-name*' NORMAL COMPLETION

DSNT701I RESOURCE LIMIT FACILITY IS INACTIVE

Explanation

This message is a section of output from the DISPLAY RLIMIT command, which described in message “DSNT700I” on page 586.

DSNT702I **RESOURCE LIMIT FACILITY HAS BEEN STOPPED. WAS USING table-name**

Explanation

This message is the normal response for a STOP RLIMIT command. Table 'table-name' was being used to determine resource limits.

System action

The governor is stopped.

System programmer response

May be used to resolve questions about what table was being used.

DSNT703I **RESOURCE LIMIT FACILITY IS ALREADY INACTIVE. STOP RLIMIT COMMAND IS IGNORED**

Explanation

A STOP RLIMIT command was entered but the resource limit facility was already stopped. The command is ignored.

System action

The system continues normal processing.

DSNT704I **table-name HAS BEEN STARTED FOR THE RESOURCE LIMIT FACILITY**

Explanation

This message is the normal response for a START RLIMIT command. Table 'table-name' is currently being used to determine resource limits.

System action

The governor has started utilizing the specified table.

System programmer response

May be used to resolve questions about what table is being used.

DSNT705I ***csect-name* DATABASE *name* CANNOT BE STOPPED. IT CONTAINS AN ACTIVE RESOURCE LIMIT SPECIFICATION TABLE**

Explanation

Database *name* cannot be stopped because it contains an active resource limit specification table.

System action

The database is not stopped.

Operator response

If the database must be stopped, either stop the resource limit facility (STOP RLIMIT), or switch it to use a resource limit specification table that is not in the database (START RLIMIT,ID=xx). In a Db2 data sharing environment, you must either stop the resource limit facility on all members of the Db2 data sharing group or switch it to use a resource limit specification table that is not in the database.

DSNT706I **TABLE *table-name* DOES NOT EXIST. THE START RLIMIT COMMAND WILL NOT USE THIS TABLE**

Explanation

The START RLIMIT command has been entered but was unable to use the table because it does not exist.

table-name
The name of the table.

System action

RLF cannot use this table for governing.

Operator response

Verify that the 1 or 2 characters following DSNRLST or DSNRLMT in the table name are the same characters that were entered as the ID on the START RLIMIT command. If the ID appears correct, contact the system programmer.

System programmer response

A table with the fully-qualified name *qualifier.table-name* does not exist. The qualifier is the value of the RLFAUTH subsystem parameter. To determine the names of the of the existing resource limit specification tables, issue SQL statements like the following examples:

```
SELECT CREATOR,NAME FROM SYSIBM.SYSTABLES
   WHERE NAME LIKE 'DSNRLST'
```

```
SELECT CREATOR,NAME FROM SYSIBM.SYSTABLES
   WHERE NAME LIKE 'DSNRLMT'
```

If the query returns a row that matches *qualifier.table-name*, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Problem determination

Collect the following diagnostic items:

- Console output showing the failing START command
- The output of the SELECT command.

DSNT707I **COLUMN *column-name* IN TABLE *table-name* IS INCORRECTLY DEFINED. THE COLUMN DEFINITION IS *attribute* WITH LENGTH *length* AND NULL ATTRIBUTE *null-attribute*. THE COLUMN DEFINITION SHOULD BE *attribute* WITH LENGTH *length* AND NULL ATTRIBUTE *null-attribute*. THE START RLIMIT COMMAND WILL NOT USE THIS TABLE.**

Explanation

The START RLIMIT command could not use table *table-name* because table *table-name* does not have the proper column definition for a resource limit specification table.

System action

The START RLIMIT command will not use table *table-name* for governing.

Operator response

Contact the system programmer.

System programmer response

Table *table-name* does not have the proper column definition for a resource limit specification table. Compare the current table column definition to the proper column definition given in the message.

User response

See Operator Response.

Problem determination

Collect the console output showing the failing START command.

DSNT708I **INDEX *index-name* DOES NOT EXIST. THE START RLIMIT COMMAND WILL NOT USE THE ASSOCIATED TABLE**

Explanation

The START RLIMIT command was unable to use the resource limit specification table DSNRLSTxx or DSNRLMTxx because index DSNARLxx or index DSNMRLxx is not defined on that table.

System action

The START RLIMIT command will not use the resource limit specification table that is associated with index *index-name*.

Operator response

Contact the system programmer.

System programmer response

Create the required index and reissue the START RLIMIT command.

User response

See Operator Response.

Problem determination

Collect the console output showing the failing START command messages.

DSNT709I **new-table-name NOW ACTIVE. old-table-name WAS OLD RESOURCE LIMIT SPECIFICATION TABLE**

Explanation

A START RLIMIT command was entered while the facility was already active. The facility remains active and switches from using the old table name to the new one.

Operator response

Notify the system programmer.

User response

Notify the system programmer.

DSNT710I **table-name ALREADY ACTIVE. START LIMIT COMMAND IGNORED**

Explanation

A START RLIMIT command was entered and the governor is already active utilizing the specified table. The command is ignored.

System action

The governor continues to use table 'table-name'.

Operator response

Verify that the ID specified on the START RLIMIT command is the correct ID. If not, reenter the command specifying the correct ID. If it is correct, no action is needed because the facility is already active and is using the correct table.

System programmer response

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

User response

See Operator Response.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

DSNT711I **COLUMN column-name IS MISSING IN TABLE table-name. SHOULD BE DEFINED AS attribute WITH LENGTH length AND NULL INDICATOR OF null-attribute**

Explanation

The START RLIMIT command has been entered but failed because COLUMN 'column-name' in resource limit specification table 'table-name' is not defined. The proper column definition is given in the message.

System action

The START RLIMIT command is ignored.

Operator response

Verify that the 1 or 2 characters following DSNRLST are what was intended to be entered as the ID on the START RLIMIT command. If not, reenter the command specifying the proper ID. If the ID appears to be correct, contact the system programmer.

System programmer response

TABLE 'table-name' does not have COLUMN 'column-name' defined. Use ALTER TABLE to define the column as specified in the message.

User response

See Operator Response.

Problem determination

Collect the console output showing the failing START command.

DSNT712I **INDEX *index-name* IS NOT FOR TABLE *table-name*. THE START RLIMIT COMMAND WILL NOT USE THIS TABLE**

Explanation

The START RLIMIT command was unable to use table *table-name* because index *index-name* is not defined for the resource limit specification table *table-name*.

System action

The START RLIMIT command will not use table *table-name* for governing.

Operator response

Contact the system programmer.

System programmer response

Drop the existing DSNARLxx or DSNRLMTxx index and create the correct index on the resource limit specification table *table-name*.

User response

See Operator Response.

Problem determination

Collect the console output showing the failing START command messages.

DSNT713I **INDEX *index-name* IS NOT UNIQUE. THE START RLIMIT COMMAND WILL NOT USE THE ASSOCIATED TABLE**

Explanation

The START RLIMIT command has been entered but failed because INDEX *index-name* in the resource limit specification table is not defined as a UNIQUE index.

System action

The START RLIMIT command will not use the resource limit specification table associated with index *index-name* for governing.

Operator response

Contact the system programmer.

System programmer response

Drop INDEX *index-name* and create it as a unique index.

User response

See Operator Response.

Problem determination

Collect the console output showing the failing START command.

DSNT714I **INDEX *index-name* IS INCORRECTLY DEFINED. THE START RLIMIT COMMAND WILL NOT USE THE ASSOCIATED TABLE**

Explanation

The START RLIMIT command was unable to use a resource limit specification table because index *index-name* is not properly defined.

System action

The START RLIMIT command will not use the resource limit specification table associated with index *index-name* for governing.

Operator response

Contact the system programmer.

System programmer response

Drop index *index-name* and create it with the correct definition.

User response

Contact the system programmer.

Problem determination

Collect the console output showing the START command messages.

Related tasks

Creating resource limit tables (Db2 Performance)

Setting limits for system resource usage by using the resource limit facility (Db2 Performance)

Related reference

Resource limit facility tables (Db2 Performance)

-START RLIMIT (Db2) (Db2 Commands)

DSNT715E **ERROR reason-code READING table-name. default WILL BE RESOURCE LIMIT FOR CORRELATION-ID correlation-id, CONNECTION-ID connection-id, LUW-ID luw-id =token**

Explanation

An error occurred while the resource limit specification table 'table-name' was being read. The limit is determined from the default specified in the system parameters. This default can be:

NOLIMIT
No limit applies.

NORUN
Zero time limit.

integer
The limit to be used.

The reason code that defines the read error is included in the message text, as are the 'connection-ID', 'correlation-ID', and the logical-unit-of-work identifier (LUW-ID) of the thread. An LUW-ID of an '*' indicates that the thread does not have a LUW-ID. If the LUW-ID is not an '*', the value is a logical-unit-of-work-id that is assigned to the thread followed by an '=' sign and a token value, which can be used in place of logical-unit-of-work-id in any Db2 command that accepts logical-unit-of-work-id as input. Correlation IDs beginning with '0nn', where 'nn' is a number from 01 to 28, identify system agents.

System action

Processing continues using the system-defined default.

Operator response

Notify the system programmer.

System programmer response

This is an I/O error. Investigate the problem indicated by the reason code and preceding messages. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

DSNT716E **AN ERROR OCCURRED ESTABLISHING A RESOURCE LIMIT FOR CORRELATION-ID correlation-id, CONNECTION-ID connection-id, LUW-ID luw-id =token. limit WILL BE USED AS THE LIMIT**

Explanation

An internal error occurred while the resource limit for the specified requester was being established. The 'limit' is determined from the default specified in the system parameters. This default can be:

NOLIMIT
No limit applies.

NORUN
Zero time limit.

integer
The limit to be used.

A logical-unit-of-work identifier (LUW-ID) of '*' indicates that the thread does not have a LUW-ID. If the LUW-ID is not an '*', the value is a logical-unit-of-work-id that is assigned to the thread followed by an '=' sign and a token value, which can be used in place of logical-unit-of-work-id in any Db2 command that accepts logical-unit-of-work-id as input. Correlation IDs beginning with '0nn', where 'nn' is a number from 01 to 28, identify system agents.

System action

Processing continues using the system-defined default.

Operator response

Notify the system programmer.

System programmer response

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

DSNT717I ***csect-name*** **TABLE SPACE** ***name*** **CANNOT BE STOPPED. IT CONTAINS AN ACTIVE RESOURCE LIMIT SPECIFICATION TABLE**

Explanation

Table space *name* cannot be stopped because it contains an active resource limit specification table.

System action

The table space is not stopped.

Operator response

If the table space must be stopped, either stop the resource limit facility (STOP RLIMIT), or switch it to use a resource limit specification table that is not in the table space (START RLIMIT,ID=xx). In a Db2 data sharing environment, you must either stop the resource limit facility on all members of the Db2 data sharing group or switch it to use a resource limit specification table that is not in the table space.

DSNT718I ***csect-name*** **INDEX SPACE** ***name*** **CANNOT BE STOPPED. IT IS DEFINED ON AN ACTIVE RESOURCE LIMIT SPECIFICATION TABLE**

Explanation

Index space *name* cannot be stopped because it contains an index on an active resource limit specification table.

System action

The index space is not stopped.

Operator response

If the index space must be stopped, either stop the resource limit facility (STOP RLIMIT), or switch it to use a different resource limit specification table that does not have an index in the index space (START RLIMIT,ID=xx). In a Db2 data sharing environment, you must either stop the resource limit facility on all members of the Db2 data sharing group or switch it to use a different resource limit specification table that does not have an index in the index space.

DSNT719I **TABLE *table-name* CANNOT BE READ. THE START RLIMIT COMMAND WILL NOT USE THIS TABLE**

Explanation

TABLE *table-name* cannot be accessed. This message might be preceded by related error messages that explain why the table cannot be accessed.

System action

The START RLIMIT command will not use table *table-name*.

Operator response

TABLE *table-name* cannot currently be accessed for reading. In the case of a deadlock or timeout, reissue the START RLIMIT command.

User response

See Operator Response.

DSNT720I **csect-name INDEX *index-name* NEEDS TO BE *index-type*. THE START RLIMIT COMMAND WILL NOT USE THE ASSOCIATED TABLE**

Explanation

The START RLIMIT command was entered but failed because the named index defined for the resource limit specification table is not defined properly.

System action

The START RLIMIT command will not use the resource limit specification table associated with index *index-name* for governing.

Operator response

Contact the system programmer.

System programmer response

Drop index *index-name* and create it with the correct definition.

User response

Contact the system programmer.

Problem determination

Collect the console output showing the failing START command.

Related tasks

Creating resource limit tables (Db2 Performance)

Setting limits for system resource usage by using the resource limit facility (Db2 Performance)

Related reference

Resource limit facility tables (Db2 Performance)

-START RLIMIT (Db2) (Db2 Commands)

DSNT721I ***csect-name* DATABASE *name* CANNOT BE STARTED WITH ACCESS (UT). IT CONTAINS AN ACTIVE RESOURCE LIMIT SPECIFICATION TABLE**

Explanation

Database *name* cannot be started with access (UT) because it contains an active resource limit specification table.

System action

The START DATABASE command is ignored.

Operator response

If the database must be started with access (UT), either stop the resource limit facility (STOP RLIMIT), or switch it to use a resource limit specification table that is not in the database (START RLIMIT,ID=xx). In a Db2 data sharing environment, you must either stop the resource limit facility on all members of the Db2 data sharing group or switch it to use a resource limit specification table that is not in the database.

DSNT722I ***csect-name* TABLE SPACE *name* CANNOT BE STARTED WITH ACCESS (UT). IT CONTAINS AN ACTIVE RESOURCE LIMIT SPECIFICATION TABLE**

Explanation

Table space *name* cannot be started with access (UT) because it contains an active resource limit specification table.

System action

The START DATABASE command is ignored.

Operator response

If the table space must be started with access (UT), either stop the resource limit facility (STOP RLIMIT), or switch it to use a resource limit specification table that is not in the table space (START RLIMIT,ID=xx). In a

Db2 data sharing environment, you must either stop the resource limit facility on all members of the Db2 data sharing group or switch it to use a resource limit specification table that is not in the table space.

DSNT723I ***csect-name*** **INDEX SPACE** ***name*** **CANNOT BE STARTED WITH ACCESS (UT). IT IS DEFINED ON AN ACTIVE RESOURCE LIMIT SPECIFICATION TABLE**

Explanation

Index space *name* cannot be started with access (UT) because it contains an index on an active resource limit specification table.

System action

The START DATABASE command is ignored.

Operator response

If the index space must be started with access (UT), either stop the resource limit facility (STOP RLIMIT), or switch it to use a different resource limit specification table that does not have an index in the index space (START RLIMIT,ID=xx). In a Db2 data sharing environment, you must either stop the resource limit facility on all members of the Db2 data sharing group or switch it to use a resource limit specification table that does not have an index in the index space.

DSNT724E ***csect-name*** **ERROR** ***reason-code*** **IN READING RESOURCE LIMIT SPECIFICATION TABLE** ***table-name*****. FOR AUTHORIZATION ID** ***auth-id*** **RUNNING THREAD WITH CORRELATION ID** ***correlation-id*****, CONNECTION ID** ***connection-id*****, AND LUWID** ***luw-id*****, USE OF** ***operation-name*** **IS NOT GOVERNED.**

Explanation

An error occurred reading resource limit specification table *table-name*. *auth-id* is assumed to be allowed to perform *operation-name*. *operation-name* is BIND or PARALLEL PROCESSING.

The reason code defining the read error is included in the message text as well as the connection ID, correlation ID, and logical unit of work (LUW) ID of the thread. An LUW-ID with an asterisk (*) indicates that the request originated at this site. If not an asterisk (*), the LUW-ID is assigned to the allied thread at the requesting site. Correlation IDs beginning with '0nn', where 'nn' is a number from 01 to 28, identify system agents.

System action

If the *operation-name* is BIND, processing continues if the *auth-id* is authorized to perform the BIND. If the *operation-name* is PARALLEL PROCESSING, query parallelism is not disabled and can be used if the value of the CURRENT DEGREE special register is 'ANY'. If the *operation-name* is PREDGOV, the active RLF (Resource Limit Facility) assumes that the RLST table does not contain a row for user-predicted ASUTIME, and the execution of the SQL statement continues as normal.

Operator response

Notify the system programmer.

System programmer response

Investigate the problem indicated by the reason code and preceding messages. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

User response

Notify the system programmer.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

DSNT725E **AN ERROR OCCURRED WHILE GOVERNING BIND OPERATIONS OF auth-id RUNNING WITH CORRELATION-ID correlation-id, CONNECTION-ID connection-id, LUW-ID luw-id. auth-id IS ALLOWED TO PERFORM BIND OPERATIONS**

Explanation

An internal error occurred while determining whether or not 'auth-id' is allowed to perform bind operations. It is assumed that 'auth-id' is allowed to perform bind operations.

An LUW-ID '*' indicates that the request originated at this site. If not an '*', the LUW-ID is assigned to the

allied thread at the requesting site. Correlation IDs beginning with '0nn' where 'nn' is a number from 01 to 28, identify system agents.

This message is issued by the following module: DSNTCAUT

System action

Processing occurs assuming the authorization ID is allowed to perform bind operations.

Operator response

Notify the system programmer.

System programmer response

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

User response

Notify the system programmer.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

DSNT726I ***csect-name*** **DATABASE** ***name*** **AND ANY SPACE IT CONTAINS CANNOT BE STARTED WITH ACCESS (UT). IT IS THE ACTIVE COMMUNICATIONS DATABASE**

Explanation

The database specified in the message cannot be started with access (UT) because it is the active communications database. In addition, spaces within the active communications database cannot be started with access (UT).

System action

The START DATABASE command is ignored.

Operator response

If the database or any space within it must be started with access (UT), you must stop the distributed data facility (STOP DDF). In a Db2 data sharing environment, you must stop the distributed data facility on all members of the Db2 data sharing group.

DSNT727I **TABLE** ***table-name*** **WILL NOT BE USED BY THE RESOURCE LIMIT FACILITY**

Explanation

This message is a normal response for a START RLIMIT command. Table *table-name* cannot be used to determine resource limits because table *table-name* does not exist.

System action

The START RLIMIT command will use the existing resource limit specification table. The name of that table is in a DSNT704I message.

System programmer response

To use *table-name* to determine resource limits, create *table-name*, and issue the -START RLIMIT command again.

DSNT728I **THE FORMAT OF TABLE** ***authid.table-name*** **IS NOT SUPPORTED IN CONVERSION MODE. THE START RLIMIT COMMAND CANNOT USE THIS TABLE**

Explanation

An attempt was made to start the resource limit facility with a table which has column definitions not supported in conversion mode.

authid
The authorization ID which created the table.

table-name
The name of the table.

System action

The resource limit facility is not started with *authid.table-name*.

System programmer response

Correct the command to specify a table with the proper column definitions.

Related tasks

Convert RLF tables to the current format (Db2 Installation and Migration)

Related reference

DSNRLMTxx resource limit tables (Db2 Performance)

DSNT735I **object name CANNOT BE STARTED. IT CONTAINS OR IS DEFINED ON THE DDL REGISTRATION TABLE(S)**

Explanation

The object specified in the message cannot be started because it contains or is defined on the DDL registration table(s). Installation SYSADM or installation SYSOPR authority is needed to start the object.

In the message, 'object' is either:

- DATABASE if the specified database contains the application and object registration tables
- TABLESPACE if the specified table space contains an application or object registration table
- INDEXSPACE if the specified index space is defined on an application or object registration table

System action

The object specified in the message is not started.

User response

Reissue the command with the proper authority.

DSNT736I ***csect-name* ASYNCHRONOUS STOP DATABASE COMMAND HAS COMPLETED FOR COMMAND: *command_string***

Explanation

Asynchronous processing for the STOP DATABASE command completed for the command whose syntax is shown in the message.

command_string is the STOP DATABASE command string for the command that is completed. The string always uses the abbreviation DB for DATABASE and SPACE for SPACENAM to save characters.

Only the first 100 characters of the STOP DATABASE command are displayed.

System action

Asynchronous processing for the STOP DATABASE command is complete.

System programmer response

No action is required.

DSNT740I ***csect-name start-or-stop* PROFILE IS ALREADY IN-PROGRESS**

Explanation

You issued either a START or STOP PROFILE command, but this command has been issued before, and is still in-progress. The *start-or-stop* indicates which command was issued.

This message is generated from module *module-name*. When you issued either a START PROFILE or STOP PROFILE command, the command failed to acquire a conditional lock.

System action

The START or STOP PROFILE command is ignored.

System programmer response

Wait for the command to complete or stop. If necessary, resubmit the command.

DSNT741I ***csect-name: start-or-stop* PROFILE IS COMPLETED**

Explanation

You issued either a START or STOP PROFILE command, and the command has completed successfully. This message is the normal response to a START or STOP PROFILE command.

System action

The START PROFILE or STOP PROFILE command is completed.

DSNT742I ***csect-name* PROFILE IS ALREADY STOPPED. STOP PROFILE COMMAND IS IGNORED**

Explanation

When you issued a STOP PROFILE command, the profile was not active or had already been stopped.

System action

The STOP PROFILE command is ignored.

DSNT743I ***csect-name* TABLE *creator-name.table-name* DOES NOT EXIST. THE START PROFILE COMMAND WILL NOT USE THIS TABLE**

Explanation

You issued a START PROFILE command to activate the profile function, but the table *creator-name.table-name* involved in this process does not exist. The reported table is an optional table and the START PROFILE command will not use it. The information intended to be reported in this table will not be available.

System action

The START PROFILE command continues, and the offending table will not be used.

System programmer response

Verify that all the tables exist, and then run the command again. You can ignore this message if the table is an optional table and continue the profile function.

DSNT744I ***csect-name* TABLE *creator-name.table-name* DOES NOT EXIST. THE START PROFILE COMMAND FAILED.**

Explanation

You issued a START PROFILE command to activate the profile function, but the table *creator-name.table-name* involved in this process does not exist. The START PROFILE command failed.

System action

The START PROFILE command failed.

System programmer response

Verify that all of the tables exist and run the command again.

DSNT745I ***csect-name* INDEX *creator-name.index-name error-type*. THE START PROFILE COMMAND FAILED**

Explanation

You issued a START PROFILE command to activate the profile function, but the index *creator-name.index-name* has an error, as indicated by *error-type*. The error can be one of the following.

- The index does not exist.
- The index is not unique.
- The index is not defined correctly.

System action

The START PROFILE command failed.

System programmer response

Verify that the table is created correctly, with the proper index, and then run the command again.

DSNT746I ***csect-name* INDEX *creator-name.index-name* COLUMN *key-column-name* NEEDS TO BE *asc-or-desc*. THE START PROFILE COMMAND FAILED.**

Explanation

You have issued a START PROFILE command to activate the profile, but the index *creator-name.index-name* on column *key-column-name* needs to be in *asc-or-desc* order. *asc-or-desc* indicates the ordering, and can either be ASC or DESC.

System action

The START PROFILE command failed.

System programmer response

Verify that the table is created correctly, with the proper index, and run the command again.

DSNT747I ***csect-name* INDEX *creator-name.index-name* IS NOT DEFINED FOR TABLE *creator-name.table-name*. THE START PROFILE COMMAND FAILED**

Explanation

You have issued a START PROFILE command to activate the profile function, but the index *creator-name.index-name* was not created for table *creator-name.table-name*.

System action

The START PROFILE command failed.

System programmer response

Verify that the table is created correctly, with the proper index, and then run the command again.

DSNT748I ***csect-name* THE COLUMN *column-name* IN TABLE *creator-name.table-name* IS NOT DEFINED PROPERLY. THE COLUMN DEFINITION IS *data-type* WITH LENGTH *length* AND NULLABLE ATTRIBUTE *attr*. THE COLUMN**

DEFINITION SHOULD BE *data-type* WITH LENGTH *length* AND NULLABLE ATTRIBUTE *attr*. THE START PROFILE COMMAND WILL NOT USE THIS TABLE

Explanation

You issued a START PROFILE command to activate the profile function, but the column *column-name* in the table *creator-name.table-name* involved in this process is improperly defined. The reported table is an optional table and the START PROFILE command will not use it. The information intended to be reported in this table will not be available.

System action

The START PROFILE command continues and the offending table will not be used.

System programmer response

Verify that the table is created correctly with the proper column, and then run the command again. You can ignore this message if the table is an optional table, and continue the profile function.

DSNT749I ***csect-name* THE COLUMN *column-name* IN TABLE *creator-name.table-name* IS NOT DEFINED PROPERLY. THE COLUMN DEFINITION IS *data-type* WITH LENGTH *length* AND NULL ATTRIBUTE *attr*. THE COLUMN DEFINITION SHOULD BE *data-type* WITH LENGTH *length* AND NULL ATTRIBUTE *attr*. THE START PROFILE COMMAND FAILED**

Explanation

You issued a START PROFILE command to activate the profile function, but the column *column-name* in the table *creator-name.table-name* involved in the process is improperly defined.

System action

The START PROFILE command failed.

System programmer response

Verify that the table is created correctly, with the proper columns, and then run the command again.

DSNT750I ***csect-name* THE COLUMN *column-name* IS MISSING IN TABLE *creator-name.table-name*. IT SHOULD BE DEFINED AS *data-type* WITH LENGTH *length* AND NULL ATTRIBUTE OF *attr*. THE START PROFILE COMMAND WILL NOT USE THIS TABLE.**

Explanation

You have issued a START PROFILE command to activate the profile function, but the column *column-name* in the table *creator-name.table-name* is missing. The reported table is an optional table, and will not be used by the START PROFILE command. The information that was intended to be reported in this table will not be available.

System action

The START PROFILE command continues and the offending table will not be used.

System programmer response

Make sure the table is created correctly with the proper columns. Then, run the command again. You can ignore this message if the table is an optional table and continue the profile function.

DSNT751I ***csect-name* THE COLUMN *column-name* IS MISSING IN TABLE *creator-name.table-name*. IT SHOULD BE DEFINED AS *data-type* WITH LENGTH *length* AND NULL ATTRIBUTE OF *attr*. THE START PROFILE COMMAND FAILED**

Explanation

You have issued a START PROFILE command to activate the profile function, but the column *column-name* in the table *creator-name.table-name* is missing. The START PROFILE command failed.

System action

The START PROFILE command failed.

System programmer response

Make sure the table is created correctly with the proper columns. Then, run the command again.

DSNT752I ***csect-name* ERROR *reason-code* IN *reading-or-writing* TABLE *creator-name.table-name*. THE START PROFILE COMMAND FAILED.**

Explanation

An error occurred when Db2 was reading or writing the specified table.

reason-code
The reason code returned from the read or write operation.

System action

The read or write operation is not completed. The START PROFILE command failed.

System programmer response

Investigate the problem indicated by the reason code. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

DSNT753I ***csect-name*** **DISPLAY PROFILE REPORT FOLLOWS:**

Explanation

This message displays output from the DISPLAY PROFILE command.

csect-name
The name of the control section that issued the message.

The output from the command consists of one or more of the following sections, in the indicated order:

Current profiling status

The output contains information about the current profiling status:

```
STATUS=profile-status
```

STATUS ***profile-status***
The profiling status. Expected values are:

ON
Profiling is active.

OFF
Profiling is inactive.

SUSPENDED
Profiling was active but is now suspended because of an error. For example, the maximum push-out limit was reached or the table space is full.

STARTING
Profiling is being started but is not yet complete.

STOPPING
Profiling is being stopped but is not yet complete.

Information about when profiling started

If the profile status is ON or SUSPENDED, the output contains information about when profiling started:

```
TIMESTAMP=profile-timestamp
```

TIMESTAMP ***profile-timestamp***
The date and time when the profiling status started. This information is displayed in the format*YYYY-MM-DD-HH.MN.SS.NNNNNN*.

Information about pushouts

The output contains information about reports that were issued for monitored SQL statements:

```
PUSHOUT=current-pushouts OUT OF maximum-pushouts
```

PUSHOUT ***current-pushouts***
The current number of reports that were issued for all monitored SQL statements since the profile was started. This value is applicable only for profiles that monitor SQL statements. This value is reported only when the profile status is ON or SUSPENDED.

OUT OF ***maximum-pushouts***
The maximum number of total reports that are allowed for all (normal and exception) statement monitoring during the lifetime of a monitor profile.

End of output

The output normally ends with the following message:

```
DISPLAY PROFILE REPORT COMPLETE
```

System action

Processing continues.

System programmer response

Take the action that is indicated for the *profile-status* value:

ON
No action is required. To stop profiling, issue STOP PROFILE.

OFF
No action is required. To start profiling, issue START PROFILE.

STARTING or STOPPING
Wait until the command execution is complete.

SUSPENDED
Correct the problem that is causing the suspension of profiling activities, then stop or restart profiling.

Related tasks

Monitoring and controlling Db2 with profile tables (Db2 Administration Guide)

Related reference

-DISPLAY PROFILE (Db2) (Db2 Commands)

-START PROFILE (Db2) (Db2 Commands)

-STOP PROFILE (Db2) (Db2 Commands)

DSNT758I *csect-name* ATTEMPT TO USE NEW COMMAND OR OPTION *new-command* BEFORE NEW FUNCTION MODE

Explanation

A new command or command option was issued before new-function mode was enabled.

command-option
The new command or command option that can be used only after new-function mode is enabled.

System action

The new command or command option is not processed.

System programmer response

To use the new command or command option, enable Db2 11 new-function mode.

Related reference

Command changes in Db2 11 (Db2 for z/OS What's New?)

DSNT759I A DEPRECATED EXPLAIN TABLE OR PROFILE TABLE FORMAT FOR *csect-name* TABLE *creator-name.table-name* IS BEING USED.

Explanation

The EXPLAIN table or profile table uses a deprecated format.

csect-name
The name of the control section that issued the message.

creator-name.table-name
The table about which this message is issued.

System action

Processing continues.

User response

Update the definition of the EXPLAIN table or profile table. Either redefine the required table by dropping it and re-creating it, or in the case of EXPLAIN tables, migrate the tables to the current format.

Related tasks

Creating EXPLAIN tables (Db2 Performance)

Related reference

Statements (Db2 SQL)

DSNT760I *csect-name* TABLE *creator-name.table-name* MUST BE ENCODED IN UNICODE. IT CANNOT BE IN ASCII OR EBCDIC.

Explanation

The EXPLAIN table is encoded as either ASCII or EBCDIC. The table must be encoded in Unicode.

csect-name
The name of the control section that issued the message.

creator-name.table-name
The table about which this message is issued.

System action

The statement cannot be processed. The explanation information is not generated.

User response

Update the definition of the EXPLAIN table. Either redefine the required EXPLAIN table by dropping it and re-creating it, or migrate EXPLAIN tables to the current format.

Related tasks

Creating EXPLAIN tables (Db2 Performance)

Related reference

Statements (Db2 SQL)

DSNT771I *csect-name* A MONITOR PROFILE *condition-type* CONDITION OCCURRED *number* TIME(S).

Explanation

A monitor profile has detected that a warning or exception condition occurred.

csect-name
The name of the control section that issued the message.

condition-type
The type of profile threshold condition that was exceeded:

EXCEPTION
A profile exception threshold was exceeded.

WARNING
A profile warning threshold was exceeded.

number
The number of times that any monitor profile warning or exception condition has occurred since the most recent DSNT771I message was issued, or since the START PROFILE command was issued.

System action

This message is issued at a minimum interval of five minutes.

In addition to issuing this message, the system writes a statistics class 4 IFCID 402 trace record for any profile warning or exception condition that occurs in a statistics interval. The statistics trace record provides counters that track the number of times a given profile threshold in a specific PROFILE ID was exceeded. See IFCID 402 for more information.

Operator response

Notify the system programmer.

System programmer response

1. Determine the destination of statistics class 4 and locate and analyze the trace record.
2. If possible, use the statistics trace record to identify which profile threshold in a given profile ID detected the warning or exception condition.
3. Determine if the profile threshold is sufficient. If the profile threshold is set too low, increase the profile threshold value in the DSN_PROFILE_ATTRIBUTES table, then refresh the threshold by issuing START PROFILE command.
4. **Optional:** Stop the profile monitoring processing by performing either of the following tasks:

   Disable monitoring for the profile
   To disable the monitoring function for a specific profile:

   a. Locate the appropriate row in SYSIBM.DSN_PROFILE_TABLE and either delete the row or change the PROFILE_ENABLED column value to N.
   b. Use the START PROFILE command to reload the profile table

   Disable all monitoring
   To disable all monitoring for both system related and statement related monitoring events that have been specified in the profile table, issue the STOP PROFILE command.
5. **Optional:** Modify the profile to specify a different diagnostic level to provide more detail message information. In the DSN_PROFILE_ATTRIBUTES table, set the ATTRIBUTE1 column setting to either WARNING_DIAGLEVEL2 or EXCEPTION_DIAGLEVEL2.

Problem determination

Analyze the statistics class 4 trace record IFCID 402.

Related tasks
Monitoring and controlling Db2 with profile tables (Db2 Administration Guide)

Related reference
-START PROFILE (Db2) (Db2 Commands)
-STOP PROFILE (Db2) (Db2 Commands)
DSN_PROFILE_ATTRIBUTES profile table (Db2 Performance)

DSNT772I ***csect-name*** **A MONITOR PROFILE** ***condition-type*** **CONDITION OCCURRED** ***number*** **TIME(S) IN PROFILE ID=*profile-id* WITH PROFILE FILTERING SCOPE=*filtering-scope* WITH REASON=*reason-code*.**

Explanation

A monitor profile has detected that a warning or exception condition occurred.

csect-name
The name of the control section that issued the message.

condition-type
The type of profile threshold condition that was exceeded:

EXCEPTION
A profile exception threshold was exceeded.

WARNING
A profile warning threshold was exceeded.

number
The number of times that any monitor profile warning or exception condition has occurred since the most recent DSNT772I message was issued, or since the START PROFILE command was issued.

profile-id
The profile ID of the monitor profile (defined in DSN_PROFILE_TABLE) that detected the condition.

filtering-scope
The profile filtering scope that is associated with the profile ID that is defined in DSN_PROFILE_TABLE. Expected values:

IPADDR
The profile filtering scope is defined for an IP address.

PRDID
The profile filtering scope is defined for a product ID.

ROLE_AUTHID
The profile filtering scope is defined for a role and an authorization ID.

ROLE
The profile filtering scope is defined for a role.

AUTHID
The profile filtering scope is defined for an authorization ID.

COLLID_PKGNAME
The profile filtering scope is defined for a collection ID and a package name.

COLLID
The profile filtering scope is defined for a collection ID.

PKGNAME
The profile filtering scope is defined for a package name.

reason-code
A Db2 reason code that describes the nature of the warning or exception.

System action

This message is issued at a minimum interval of five minutes.

In addition to issuing this message, the system writes a statistics class 4 IFCID 402 trace record for any profile warning or exception condition that occurs in a statistics interval. The statistics trace record provides counters that track the number of times a given profile threshold in a specific PROFILE ID was exceeded. See IFCID 402 for more information.

Operator response

Notify the system programmer.

System programmer response

1. Review the information provided for *reason-code*.
2. Determine the destination of statistics class 4 and locate and analyze the trace record.
3. If possible, use the statistics trace record to identify which profile threshold in a given profile ID detected the warning or exception condition.
4. Determine if the profile threshold is sufficient. If the profile threshold is set too low, increase the profile threshold value in the DSN_PROFILE_ATTRIBUTES table, then refresh the threshold by issuing START PROFILE command.
5. **Optional:** Stop the profile monitoring processing by performing either of the following tasks:

   Disable monitoring for the profile
   To disable the monitoring function for a specific profile:

   a. Locate the appropriate row in SYSIBM.DSN_PROFILE_TABLE and either delete the row or change the PROFILE_ENABLED column value to N.

   b. Use the START PROFILE command to reload the profile table

   Disable all monitoring
   To disable all monitoring for both system related and statement related monitoring events that have been specified in the profile table, issue the STOP PROFILE command.
6. **Optional:** Modify the profile to specify a different diagnostic level to issue this message less frequently. In the DSN_PROFILE_ATTRIBUTES table, set the ATTRIBUTE1 column setting to one of the following values: WARNING, EXCEPTION, WARNING_DIAGLEVEL1, or EXCEPTION_DIAGLEVEL1.

Problem determination

Analyze the statistics class 4 trace record IFCID 402.

Related concepts
Db2 reason codes (Db2 Codes)
Related tasks
Monitoring and controlling Db2 with profile tables (Db2 Administration Guide)
Related reference
-START PROFILE (Db2) (Db2 Commands)
-STOP PROFILE (Db2) (Db2 Commands)
DSN_PROFILE_ATTRIBUTES profile table (Db2 Performance)

DSNT773I ***csect-name*** **SERVER DISTRIBUTED AGENT WITH LUWID=*luwid=token* THREAD-INFO=*thread-information* FOR LOCATION=*location* RECEIVED *event-type* WARNING DUE TO PROFILE ID=*profile-id***

Explanation

A monitor profile has detected that a warning condition occurred.

csect-name
The name of the control section that issued the message.

luwid=token
The logical unit of work identifier (LUWID) and a six-digit token value. The token value can be used in any Db2 command that accepts an LUWID as input.

thread-information
Information about the thread. The information is presented in a colon-delimited list that contains the following segments:

- The primary authorization ID that is associated with the thread.
- The name of the user's workstation.
- The ID of the user.
- The name of the application.
- The statement type for the previously executed statement: dynamic or static.
- The statement identifier for the previously executed statement, if available. The statement identifier can be used to identify the particular SQL statement. For static statements, the statement identifier correlates to the STMT_ID column in the SYSIBM.SYSPACKSTMT table. For dynamic statements, the statement identifier correlates to the STMT_ID column in the DSN_STATEMENT_CACHE_TABLE table. That statement might not have contributed to the current failure.
- The name of the role that is associated with the thread.
- The correlation token that can be used to correlate work at the remote system with work performed at the Db2 subsystem. The correlation token, if available, is enclosed in '<' and '>' characters, and contains three components, separated by periods:
  - A 3 to 39 character IP address.
  - A 1 to 8 character port address.
  - A 12 character unique identifier.

An asterisk (*) in any segment indicates that the information is not available.

location
The IP address of the requester.

event-type
The type of profile threshold event, as defined in the SYSIBM.DSN_PROFILE_ATTRIBUTES table, that was exceeded:

MONITOR CONNECTIONS
A profile warning threshold was exceeded for the monitor connections event type.

MONITOR THREADS
A profile warning threshold was exceeded for the monitor threads event type.

IDLE THREAD TIMEOUT
A profile warning threshold was exceeded for the monitor idle threads event type.

profile-id
The profile ID of the monitor profile (defined in DSN_PROFILE_TABLE) that detected the condition.

System action

This message is issued every time that a thread exceeds a profile threshold as a result of the associated SYSIBM.DSN_PROFILE_ATTRIBUTES table ATTRIBUTE1 column value of WARNING_DIAGLEVEL3.

Operator response

Notify the system programmer.

System programmer response

Use the information in the message to determine which application was running when the warning occurred. Fix any application errors that caused the warning. If this message occurs excessively, consider changing the ATTRIBUTE1 column value.

Related tasks
Monitoring idle threads with profile tables (Db2 Administration Guide)
Related reference
DSN_PROFILE_ATTRIBUTES profile table (Db2 Performance)

DSNT774I ***csect-name*** **SERVER DISTRIBUTED AGENT WITH LUWID=*luwid=token* THREAD-INFO=*thread-information* FOR LOCATION=*location* RECEIVED *event-type* EXCEPTION DUE TO PROFILE ID=*profile-id***

Explanation

A monitor profile has detected that an exception condition occurred.

csect-name
The name of the control section that issued the message.

luwid=token
The logical unit of work identifier (LUWID) and a six-digit token value. The token value can be used in any Db2 command that accepts an LUWID as input.

thread-information
Information about the thread. The information is presented in a colon-delimited list that contains the following segments:

- The primary authorization ID that is associated with the thread.
- The name of the user's workstation.
- The ID of the user.
- The name of the application.
- The statement type for the previously executed statement: dynamic or static.
- The statement identifier for the previously executed statement, if available. The statement identifier can be used to identify the particular SQL statement. For static statements, the statement identifier correlates to the STMT_ID column in the SYSIBM.SYSPACKSTMT table. For dynamic statements, the statement identifier correlates to the STMT_ID column in the DSN_STATEMENT_CACHE_TABLE table. That statement might not have contributed to the current failure.
- The name of the role that is associated with the thread.
- The correlation token that can be used to correlate work at the remote system with work performed at the Db2 subsystem. The correlation token, if available, is enclosed in '<' and '>' characters, and contains three components, separated by periods:
  - A 3 to 39 character IP address.
  - A 1 to 8 character port address.
  - A 12 character unique identifier.

An asterisk (*) in any segment indicates that the information is not available.

location
The IP address of the requester.

event-type
The type of profile threshold event, as defined in the SYSIBM.DSN_PROFILE_ATTRIBUTES table, that was exceeded:

MONITOR CONNECTIONS
A profile warning threshold was exceeded for the monitor connections event type.

MONITOR THREADS
A profile warning threshold was exceeded for the monitor threads event type.

IDLE THREAD TIMEOUT
A profile warning threshold was exceeded for the monitor idle threads event type.

profile-id
The profile ID of the monitor profile (defined in DSN_PROFILE_TABLE) that detected the condition.

System action

This message is issued every time that a thread exceeds a profile threshold as a result of the associated SYSIBM.DSN_PROFILE_ATTRIBUTES table ATTRIBUTE1 column value of EXCEPTION_DIAGLEVEL3.

Operator response

Notify the system programmer.

System programmer response

Use the information in the message to determine which application was running when the exception occurred. Fix any application errors that caused the exception to occur. If this message occurs excessively, consider changing the ATTRIBUTE1 column value.

Related tasks
Monitoring idle threads with profile tables (Db2 Administration Guide)

Related reference
DSN_PROFILE_ATTRIBUTES profile table (Db2 Performance)

DSNT800I ***csect-name*** **DB2 CANNOT IDENTIFY TO IRLM. IRLM CANNOT CONNECT TO ITS DATA SHARING GROUP. THE LOCK STRUCTURE THAT IRLM ATTEMPTED TO ACCESS WAS *strname*.**

Explanation

IRLM failed to connect to the IRLM data sharing group. This message accompanies abend reason code 00E30806.

System action

Db2 terminates abnormally with reason code 00E30806.

System programmer response

Some possible reasons why IRLM could not connect to its data sharing group are:

- The lock structure is not properly defined in the active MVS CFRM administrative policy. The lock structure name is a concatenation of the Db2 data sharing group name and the string 'LOCK1' separated by an underscore (_). For example, if the

Db2 data sharing group name is DSNCAT, DSNCAT_LOCK1 is the lock structure name.

Ensure that the lock structure is properly defined in the active CFRM policy. The name of the lock structure that IRLM attempted to access is given in this message. IRLM issues message DXR138E to indicate that the lock structure definition could not be accessed in the active CFRM policy.

- IRLM could not connect the lock structure. The reason for the connect failure is given in IRLM message DXR135E.
- IRLM could not join its data sharing group. The reason for the join failure is given in IRLM message DXR134E.
- IRLM joined the wrong group. The set of IRLMs that are connected to a given lock structure must all be members of the same group. Ensure that the GROUP parameter is correctly specified in the IRLM startup procedure. If you give an incorrect group name, IRLM connects the lock structure, and then times out waiting for responses from other connectors. IRLM issues message DXR133I for the timeout.

DSNT801I **ACTION A (ADD) DOES NOT ALLOW GENERIC DISPLAY (% IN DATA FIELD).**

Explanation

You have to specify a specific data item in the DATA field.

This message is issued by the following panel: DSN8SSH

System action

The panel is redisplayed, and the cursor is placed on the field in error.

User response

Enter specific data in the DATA field.

DSNT802I **ONLY ACTION D (DISPLAY) IS ALLOWED FOR DEPARTMENT STRUCTURE.**

Explanation

You cannot add, update, or erase a department structure. You can only display it.

This message is issued by the following panel: DSN8SSH

System action

The panel is redisplayed, and the cursor is placed on the field in error.

User response

Change the ACTION field to D, or change the OBJECT field to DE or EM.

DSNT803I ***csect-name*** **DB2 CANNOT IDENTIFY TO IRLM. THE REQUESTED FUNCTION LEVEL IS NOT SUPPORTED.**

Explanation

An attempt was made to identify to an IRLM that does not support the level of function Db2 needs. This message accompanies abend reason code 00E30800.

System action

Db2 terminates abnormally with reason code 00E30800.

System programmer response

Ensure that the STEPLIB statement in your IRLM startup procedure is referencing the correct IRLM code library and that IRLM is at the appropriate level of maintenance.

If an IRLM with a lower function level was automatically started by a Db2 subsystem that abnormally terminated with abend reason code 00E30800, cancel the IRLM job prior to restarting Db2 with the appropriate level of IRLM maintenance.

DSNT804I ***csect-name*** **THERE ARE MODIFY LOCKS OWNED BY THIS DB2 THAT HAVE BEEN RETAINED**

Explanation

When Db2 disconnected from IRLM during Db2 shutdown, IRLM indicated that there were still outstanding modify locks. These locks were retained by IRLM. The retained locks continue to protect the resources on which they are held from requests from other DB2s in the data sharing group. That is, IRLM rejects any lock request from another Db2 that is incompatible with the retained state of the lock. The locks are retained until the terminating Db2 subsystem is restarted and the resources on which the locks are held are recovered.

System action

Db2 continues with its shutdown processing.

System programmer response

No response is necessary.

DSNT807I ***csect-name*** **IRLM PURGE OF RETAINED LOCKS FAILED. RETURN CODE =** ***retcode*** **SUB-CODE =** ***subcode***

Explanation

Db2 issued a PURGE request to IRLM to purge retained locks for this Db2. The PURGE request did not complete successfully. This message shows the return code and subcode from IRLM.

System action

Db2 abends with reason code 00E30808. Restart processing is terminated.

System programmer response

Refer to the IRLM codes.

DSNT809E ***csect-name*** **FEEDBACK FROM IRLM IDENTIFY INDICATED IRLM DID NOT CONNECT TO THE LOCK STRUCTURE**

Explanation

Db2 identified to IRLM, but cannot continue because IRLM did not connect to the lock structure. Global locking is ignored. This message accompanies abend reason code 00E30809.

System action

Db2 abnormally terminates with reason code 00E30809.

System programmer response

This condition happens if you are running Db2 in data sharing mode, but the associated IRLM is running with local scope (SCOPE=LOCAL in the IRLM startup procedure). If you are running Db2 in data sharing mode, ensure that the associated IRLM startup procedure specifies SCOPE=GLOBAL. Conversely, if you are not running Db2 in data sharing mode, ensure that the associated IRLM startup procedure specifies SCOPE=LOCAL.

DSNT810E ***csect-name*** **DB2 CANNOT IDENTIFY TO IRLM. AN INVALID LOCK STRUCTURE NAME WAS DETECTED.**

Explanation

Db2 could not identify to IRLM because of an invalid lock structure name. This message accompanies abend reason code 00E30807.

System action

Db2 startup terminates abnormally with reason code 00E30807.

System programmer response

This condition happens if you are not running Db2 in data sharing mode, but the associated IRLM is running with global scope (SCOPE=GLOBAL in the IRLM startup procedure). If you are not running Db2 in data sharing mode, ensure that the associated IRLM startup procedure specifies SCOPE=LOCAL. Conversely, if you are running Db2 in data sharing mode, ensure that the associated IRLM startup procedure specifies SCOPE=GLOBAL.

DSNT811E ***csect-name*** **DB2 CANNOT IDENTIFY TO IRLM. REQUEST VIOLATES ONE DB2 PER IRLM RULE.**

Explanation

Db2 could not identify to IRLM because another DBMS is already identified to the IRLM. This message accompanies abend reason code 00E30802.

System action

Db2 abends with reason code 00E30802.

System programmer response

IRLM Version 2.1 enforces a one to one (1:1) mapping between IRLM and Db2. Multiple DBMS subsystems can no longer use the same IRLM. Ensure that:

- Each Db2 subsystem is associated with its own IRLM subsystem.
- The correct IRLM procedure name and subsystem name are specified in the Db2 system parameters.

DSNT814I **NON-LOCAL INFORMATION UNAVAILABLE FOR** ***object = name***

Explanation

One member of the Db2 data sharing group was unable to obtain information from another member for one of these reasons:

- Overflow of the maximum buffer area sent to the Db2 subsystem running the DISPLAY. This buffer area contains the DISPLAY information.

- Problems occurred while requesting DISPLAY DB information from peer Db2 subsystems.

Terms pertinent to this message:

object
Either DATABASE or SPACE

name
The name of the DATABASE or SPACE

User response

- Issue DISPLAY GROUP to see if any Db2 members are down or unresponsive and then reissue the DISPLAY DATABASE command.
- Specify individual database names or space names instead of specifying '*'.

DSNT816I ***csect-name*** **THE REAL-TIME STATISTICS COLLECTION PROCESS IS STOPPED**

Explanation

The statistics database stopped successfully, and the real-time statistics process is halted.

System action

Db2 will not externalize in-memory statistics.

Severity

0 (informational)

DSNT818I ***csect-name*** **INVALID SPACENAME SPECIFIED**

Explanation

Incorrect syntax is specified for the table space name while issuing START/STOP/DISPLAY Database Commands.

System action

Db2 will not process the command.

Severity

0 (informational)

DSNT820I **DB2 IS STARTING IRLM SUBSYSTEM=*irlm-ssid***

Explanation

Automatic restart of Db2 is starting the IRLM subsystem with the name that was specified by the IRLMSID subsystem parameter in the DSNZPARM module that was used for Db2 startup.

irlm-ssid
The name of the IRLM subsystem that is started.

System action

The Db2 restart process start starts the specified IRLM subsystem.

Operator response

None.

System programmer response

None.

User response

None.

Problem determination

Check the IRLMNM parameter value that is specified in the IRLM startup procedure. The IRLM startup procedure is specified by the IRLMPRC subsystem parameter. The IRLMNM parameter value must be the same as the IRLMSID parameter value in the DSNZPARM module that was used at startup. If Db2 automatic restart fails, refer to message DSNT384I for more information on diagnosing the problem.

Related reference
PROC NAME field (IRLMPRC subsystem parameter) (Db2 Installation and Migration)
SUBSYSTEM NAME field (IRLMSID subsystem parameter) (Db2 Installation and Migration)

Related information
DSNT384I
IRLM AUTO-START WAIT TIME EXCEEDED

Chapter 16. DSNU messages

Message identifiers that begin with DSNU communicate information about Db2 utilities.

The severity values shown for the utility messages that follow are returned as the job-step condition code from the job step during which the message is issued. If additional messages having higher severity values are issued during the same job step, the higher value is reflected as the job-step condition code.

The output of DSNU messages that are sent to SYSPRINT will have a timestamp after the message number. This timestamp uses the Julian date format of HH:MM:SS:TT.

Severity values have the following meanings:

0	Informational	No error occurred
4	Warning	A condition was detected. The user might need to take further action.
8	Error	An error was detected. Processing could not continue.
12	Severe error	An authorization error was detected. Processing could not continue.

DSNU000I ***csect-name*** **OUTPUT START FOR UTILITY, UTILID =** ***uuuuuuu***

Explanation

This message marks the start of output for the given utility job. The utility ID used to identify the utility job is 'uuuuuuu'.

System action

Utility processing continues.

Severity

0 (informational)

DSNU001I ***csect-name*****- RELEASE DEPENDENT MODULE** ***module-name*** **WAS NOT FOUND**

Explanation

The system could not find the specified module in the indicated library (private library, job library, or link library).

System action

The utility job is abended.

System programmer response

The last three characters of the module name indicate the Db2 release level of the subsystem identified in the parameters passed to DSNUTILB. However, LOAD could not find the release dependent utility module for that release in the indicated library. This is probably a maintenance problem.

User response

Ensure that the load module library is indicated correctly and that the indicated library contains the requested program. If the indicated library does not contain the requested program, contact the system programmer.

DSNU002I ***csect-name*** **- COULD NOT LOAD RELEASE DEPENDENT MODULE** ***module-name*** **CODE=code REASON=reason**

Explanation

During the load of 'module-name', MVS returned the indicated system completion code and reason.

System action

The utility job is abended.

User response

Refer to the appropriate MVS publication.

DSNU003I ***csect-name*** **NOT INVOKED APF AUTHORIZED**

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Explanation

The stored procedure was not invoked as APF-authorized.

csect-name
The name of the control section that issued the message.

System action

The utility is not run by the stored procedure.

System programmer response

Check the following items for any of the following Db2-supplied utility stored procedures:

- DSNUTILS
- DSNUTILU
- The entry in SYSIBM.SYSROUTINES specifies that the stored procedure runs in a WLM-established address space (WLM_ENVIRONMENT is not blank):
- The load module for the stored procedure is link-edited with AC(1).
- The load module for the stored procedure is in an APF-authorized library.
- All the libraries in STEPLIB JOBLIB are APF-authorized.

If you suspect an error in Db2, see the information about collecting data for Db2 diagnosis.

User response

Notify the system programmer.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- SYSPRINT output, including JCL, for the application program or batch job, and system messages that were issued. Make sure that MSGLEVEL=(1,1) on the JOB statement so that all diagnostic information is sent to SYSPRINT.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

Severity

8 (error)

Related tasks

Collecting diagnostic data (Collecting data)

Related reference

SYSROUTINES catalog table (Db2 SQL)

DSNUTILS stored procedure (deprecated) (Db2 SQL)

DSNUTILU stored procedure (Db2 SQL)

DSNU004I ***csect-name*** **UTILITY** ***utility-name*** **NOT SUPPORTED**

Explanation

The specified utility is not supported by the DSNUTILS stored procedure.

csect-name
The name of the control section that issued the message.

utility-name
The name of the utility.

Only the following *utility-name* values are supported:

ANY"1" on page 609
CHECK DATA
CHECK INDEX
CHECK LOB
COPY
COPYTOCOPY
DIAGNOSE
LOAD
MERGECOPY
MODIFY RECOVERY
MODIFY STATISTICS
QUIESCE
REBUILD INDEX
RECOVER
REORG INDEX
REORG LOB
REORG TABLESPACE
REPAIR
REPORT RECOVERY
REPORT TABLESPACESET
RUNSTATS INDEX
RUNSTATS TABLESPACE
STOSPACE
UNLOAD

1. ANY indicates that TEMPLATE dynamic allocation is to be used. This value suppresses the dynamic allocation that is normally performed by the DSNUTILS stored procedure.

System action

The utility is not run by the stored procedure.

User response

Run the utility as a batch job.

Severity

8 (error)

Related reference

DSNUTILS stored procedure (deprecated) (Db2 SQL)

DSNU005I ***csect-name input-record***

Explanation

This message displays the utility statements that occur before and after a syntax error, as they were provided as input to the utility parser.

csect-name
The name of the control section that issued the message.

input-record
The utility statements.

If the RUNSTATS utility used a statistics profile, the control statement might contain references to the nonexistent objects `THIS.TABLE` and `THIS.TS`, which did not appear in the submitted control statement. Such references are added only when they are required to form a complete utility control statement and are otherwise meaningless.

An additional error message follows this message and identifies why the utility statement caused a parser error. A maximum of 500 DSNU005I messages are issued after syntax error. In the final DSNU005I instance, the message text is `DSNU005I STATEMENT ECHOING TERMINATED`.

System action

The action depends on the type of message that follows the follows the DSNU005I message:

- For (RC8) messages, processing ends and the utility cannot be restarted.
- For (RC0) or warning (RC4) messages, processing continues.

User response

If an error (RC8) message was issued, correct the error, and resubmit the job.

In most cases, you must correct a syntax error in your utility control statement input, which is either the SYSIN data set, or the UTSTMT input to the any of the following utility stored procedures:

- DSNUTILS
- DSNUTILU

If the utility input specifies USE PROFILE and the DSNU005I messages are preceded by message DSNU1368I, the syntax error must be corrected in the statistics profile for the indicated table in the SYSIBM.SYSTABLES_PROFILES table. If the utility control statement in error was produced by a separate database administration tool, contact the service provider for that tool.

If this message contains indecipherable statements, see the information about utility control statements and the rules about encoding them in EBCDIC or Unicode.

Severity

8 (error)

Related concepts

Utility control statements (Db2 Utilities)

Statistics profiles (Db2 Performance)

Related reference

SYSTABLES_PROFILES catalog table (Db2 SQL)

DSNU006I ***csect-name* DB2 SYSTEM *system-name* HAS NOT BEEN STARTED**

Explanation

Utility startup processing has been unable to connect to the indicated Db2 subsystem, because a -START DB2 command has not been issued for that subsystem.

System action

Utility processing is terminated without invoking the requested utility or utilities.

Operator response

Contact the system programmer to determine if a -START DB2 command should be issued for the indicated subsystem.

System programmer response

Have the operator issue a -START DB2 command for the indicated subsystem.

User response

Correct your JCL to specify the correct subsystem-name on the EXEC statement, and resubmit the job. Otherwise, contact the system programmer to determine when the subsystem will be available for processing.

Problem determination

Db2 must be started in order to execute Db2 utilities.

Severity

8 (error)

DSNU007I ***csect-name*** **DB2 SYSTEM** ***system-name*** **DOES NOT EXIST**

Explanation

Utility startup processing has been unable to connect to the indicated Db2 subsystem, because it does not exist on this system.

csect-name
The name of the control section that issued the message.

system-name
The name of the Db2 subsystem that does not exist.

System action

Utility processing is terminated without invoking the requested utility or utilities.

System programmer response

Ensure that the correct Db2 subsystem has been started with the -START DB2 command.

If you use RACF to protect connections to Db2 subsystems, you might have to create additional RACF profiles in the DSNR class. Otherwise, connections to some Db2 subsystems might fail. Use the RACF RDEFINE command to add RACF profiles in the DSNR class to protect all Db2 subsystems. For example:

```
RDEFINE DSNR DB81.BATCH UACC(CONTROL)
```

User response

Correct your JCL to specify the correct subsystem name on the EXEC statement, and resubmit the job. Contact your system programmer if you are not sure which Db2 subsystem you should specify.

Problem determination

Db2 must be started in order to execute Db2 utilities.

Severity

8 (error)

Related reference
-START DB2 (Db2) (Db2 Commands)
RACF RDEFINE command (define general resource profile) (Security Server RACF Command Language Reference)

DSNU008I ***csect-name*** **SPECIFIED USER FAILED VALIDITY CHECK**

Explanation

Utility startup processing has been unable to connect to Db2, because the user failed the connection validity check.

System action

Utility processing is terminated without invoking the requested utility or utilities.

System programmer response

Locally defined RACF or equivalent security system connection authorization have denied the user access to Db2. Permit Db2 connection authorization if this user should be allowed access.

User response

Contact the system programmer for assistance with your installation's security checking.

Severity

8 (error)

DSNU009I ***csect-name*** **SPECIFIED USER NOT AUTHORIZED FOR DB2 UTILITIES**

Explanation

Utility startup processing for the user indicated on the job statement failed, because the user is not authorized to execute Db2 utilities.

System action

Utility processing is terminated without invoking the requested utility or utilities.

System programmer response

If the USER specified something on the job statement that is incorrect, correct it, and resubmit the job. Use the SQL GRANT command to give the user the required authority.

User response

Contact your system programmer for assistance with your installation's security checking.

Severity

8 (error)

DSNU010I ***csect-name*** **UTILITY EXECUTION COMPLETE, HIGHEST RETURN CODE =** ***rr***

Explanation

The utility completed processing with a return code of 'rr'. This indicates that no terminating error was detected.

System action

In most cases, the SYSIBM.SYSUTIL record for this job step is deleted from SYSIBM.SYSUTIL. However, if the utility used was REORG and UNLOAD(PAUSE), the SYSIBM.SYSUTIL record remains intact so that REORG can be restarted at the RELOAD phase.

User response

If the return code ('rr') is 0, no response is required.

If the return code ('rr') is 4, the utility output should be examined for other messages.

Severity

0 (informational) or 4 (warning)

DSNU011I ***csect-name*****- THE CURRENT TIME ZONE OFFSET:** ***offset-value*** **EXCEEDS +-24 HOURS. THE ALLOWABLE RANGE IS -82397 TO +82397 UNITS. SEE SQLCODE -187.**

Explanation

A utility has detected an invalid z/OS time zone offset.

csect-name
The name of the control section that issued the message.

offset-value
The invalid time zone offset that was specified. Db2 requires the offset to be within the range -82397 to +82397, inclusive. Each unit represents 1.048576 seconds.

System action

The utility job either ends with return code 8 or abends with reason code 00E40340.

System programmer response

One or more of the following conditions exists on the z/OS system on which this error occurred:

- The system was configured at IPL with an invalid time zone offset. To correct the offset, update the CLOCK*xx* member of SYS1.PARMLIB.
- A SET DATE console command modified the date. Use the SET DATE command to correct the date.
- A SET CLOCK console command modified the time. Use the SET CLOCK command to correct the time.

User response

Contact the system programmer.

Severity

8 (error)

Related information
-187 (Db2 Codes)
00E40340 (Db2 Codes)

DSNU012I ***csect-name*** **UTILITY EXECUTION TERMINATED, HIGHEST RETURN CODE =** ***rr***

Explanation

The utility execution was terminated. An error was detected that would not allow processing to continue. The return code has a value of 8.

System action

Utility processing is terminated.

User response

Examine utility output for other error messages.

Severity

8 (error)

DSNU013I ***csect-name*** **JOB WITH DUPLICATE UTILID FOUND IN SYSUTIL**

Explanation

An entry with the same qualifier was found in the SYSIBM.SYSUTIL table for a job that was previously terminated.

System action

The utility job is abended with reason code X'00E40018'.

User response

If you issued the job in order to re-run the utility, then use the -TERM utility command to delete the entry that has the same qualifier from the SYSIBM.SYSUTIL table. If the job has no relation to the SYSIBM.SYSUTIL entry job, then use a new qualifier.

DSNU014I ***csect-name*** **JOB WITH DUPLICATE UTILID CURRENTLY EXECUTING**

Explanation

A job with the same qualifier was found to be executing.

System action

Utility processing is terminated.

User response

If the job with the same qualifier that is currently executing is correct, either wait for the job to complete before using the same qualifier, or use another qualifier. If the job currently executing is incorrect, the -TERM command can be used to terminate it, and the failing job can be resubmitted. Do not -TERM UTILITY a utility job step that is currently active in REORG beyond the UNLOAD phase.

DSNU015I ***csect-name*** **JOB WITH UTILID NOT FOUND IN SYSUTIL FOR RESTART**

Explanation

A utility job was submitted to restart a utility job that had previously failed. The SYSIBM.SYSUTIL entry for the specified qualifier provided was not found.

System action

Utility processing is not initiated.

User response

Use the -DISPLAY utility command to determine the correct qualifier. The job can then be resubmitted.

Severity

8 (error)

DSNU016I ***csect-name*** **UTILITY BATCH MEMORY EXECUTION ABENDED, REASON=X0*rrr cause***

Explanation

The utility batch address space has abended. If X'0rrr' is four characters in length (that is, X'00C1'), the abend was a system X'rrr' abend. If X'0rrr' is four characters in length and system abend X'000' was indicated, a user abend was issued. If X'0rrr' is eight characters in length, the abend was a system X'04E' abend, and X'0rrr' is an abend reason code.

If the value of general register 2 is not zero, then *cause* will contain CAUSE=X'*cccccccc*' where X'*cccccccc*' is the value of general register 2. This information is for service purposes only.

System action

The utility job is abended. The SYSIBM.SYSUTIL entry for the job is retained in the SYSUTIL table.

System programmer response

If a system abend was encountered (4 characters), refer to the appropriate MVS publication. If an eight-character abend reason code was encountered, analyze the values in the SYSIBM.SYSUTIL directory table.

User response

Consult the system programmer to obtain information on failure analysis. If the cause of the failure is correctable, the utility job can be restarted. If the error cannot be corrected, use the -TERM UTILITY command to delete the failing job's utility ID from SYSIBM.SYSUTIL.

Related reference

-TERM UTILITY (Db2) (Db2 Commands)

SYSUTIL table (Db2 SQL)

Db2 abend completion codes (X'04E' and X'04F) (Db2 Codes)

DSNU017I ***csect-name*** **UTILITY DATA BASE SERVICES MEMORY EXECUTION ABENDED, REASON=X0*rrr* CAUSE=X0*rrr***

Explanation

The database services address space has abended. If X'0rrr' is four hexadecimal digits in length (for

example, X'00C1'), the abend was an MVS X'rrr' abend. If X'0rrr' is eight hexadecimal digits in length, the abend was a Db2 subsystem X'04E' abend, and X'0rrr' is an abend reason code.

If the value of general register 2 is not zero, then *cause* will contain CAUSE=X'*cccccccc*' where X'*cccccccc*' is the value of general register 2. This information is for service purposes only.

For example, one possible reason, among many, for this message is that catalog tables contain invalid data that was updated by the use of SQL statements or by tools. When such updates introduce invalid data, they can cause unpredictable results, including abends for RUNSTATS and other utilities

System action

The utility job is abended. The entry for the job is retained in the SYSIBM.SYSUTIL table.

System programmer response

If an MVS system abend was encountered (4 hexadecimal digits), refer to the appropriate MVS publication. If an abend reason code was encountered (8 hexadecimal digits), look up the reason code. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

User response

Consult with the system programmer to obtain information about failure analysis. If the cause of the failure is correctable, the utility job can be restarted. If the error cannot be corrected, the -TERM command should be used to delete the failing job's utility id from SYSIBM.SYSUTIL.

If you suspect that the error is the result of invalid data in the catalog, run the RUNSTATS utility at the table space level to correct the data.

Related concepts

Db2 reason codes (Db2 Codes)

Related reference

SYSUTIL table (Db2 SQL)

-TERM UTILITY (Db2) (Db2 Commands)

DSNU018I ***csect-name*** **JOB IS NOT RESTARTABLE DUE TO -START ACCESS FORCE COMMAND**

Explanation

A utility job was submitted to restart a utility job that previously failed. Although the SYSIBM.SYSUTIL entry for the specified qualifier was found, the job is not restartable because of a -START DATABASE ACCESS FORCE command. The -START DATABASE ACCESS FORCE command deleted the utility-in-process state of one or more (but not all) target objects in the job.

System action

The utility job is abended with reason code X'00E40018'.

User response

If the specified qualifier is correct, use the -TERM UTILITY command to terminate the utility and resubmit the job as a nonrestartable job. If the -TERM UTILITY command fails, use the -START DATABASE ACCESS FORCE command to force ALL target objects (table spaces and indexes) in the job. When the last object is forced, the SYSIBM.SYSUTIL record is deleted. If the qualifier is incorrect, correct it and restart the job.

DSNU019I ***csect-name*** **THIS UTILITY IS NOT ALLOWED AT A DB2 TRACKER SITE**

Explanation

When a Db2 subsystem serves as a tracker site, it cannot run utility *csect-name*. A Db2 subsystem is also a tracker site if the value of subsystem parameter TRKRSITE is YES. You may run only the following utilities at a tracker site Db2:

- REPORT
- RECOVER without the TORBA, TOLOGPOINT, or TOCOPY options
- DIAGNOSE

System action

The utility terminates.

System programmer response

If this Db2 subsystem does not need to serve as a remote site tracker system, remove its tracker site status before re-trying the utility. You may remove the tracker site status by stopping the Db2 subsystem, then restarting it with TRKRSITE = NO.

User response

Contact the system programmer.

Severity

8 (error)

DSNU020I ***csect-name*** **JOB STEP INCOMPLETE**

Explanation

The REORG utility was invoked with the UNLOAD PAUSE option. This causes the immediate suspension of the job after the unload phase completes. Subsequent utilities that are invoked in the same job step are not run.

csect-name
The name of the control section that issued the message.

System action

Further utility processing is terminated.

User response

Resubmit the job with the RESTART(PHASE) parameter after the requested user action has been taken with the unload data set.

Problem determination

Check the syntax of the UNLOAD keyword utility control statement.

Severity

4 (warning)

Related reference
Syntax and options of the REORG TABLESPACE control statement (Db2 Utilities)
Syntax and options of the REORG INDEX control statement (Db2 Utilities)

DSNU021I ***utility-name*** **UTILITY WITH UTILID = *utilid* WHICH ENDED IN PHASE = *phase-name*, IS ATTEMPTING TO RESTART (*restart-type*)**

Explanation

The utility is attempting to restart with a different restart method than the one that was specified.

utility-name
The name of the utility.

utilid
The utility ID.

phase-name
The utility phase in which the utility job ended.

restart-type

The restart method that is being used. *restart-type* can be one of the following values:

PHASE
The utility restarts from the beginning of the phase that was being processed.

CURRENT
The utility restarts from the last commit point that was taken during the execution of the utility phase.

The type of restart might be changed during restart execution depending on the utility and the phase where the original job ended.

System action

The system continues processing.

User response

No action is required.

Severity

0 (informational)

Related tasks
Restarting an online utility (Db2 Utilities)

DSNU022I ***csect-name*** **- A UTILITY RUNNING UNDER A STORED PROCEDURE REQUIRES A WLM ENVIRONMENT WITH NUMTCB=1. UTILID *utility-ID* IS RUNNING WITH NUMTCB = *tcb-number*.**

Explanation

When the utility stored procedure invoked a utility, the stored procedure was running in a stored procedure address space that was started with NUMTCB>1. The stored procedure address space in which the utility stored procedure runs must be started with NUMTCB=1.

csect-name
The name of the control section that issued the message.

utility-ID
The utility identifier or the UID parameter that was used in the utility job step.

tcb-number
The NUMTCB parameter of the job that started the WLM-managed stored procedure address space. The NUMTCB value represents the maximum number of task control blocks (TCBs) that can run concurrently in an address space that is initiated by the WLM environment.

System action

Execution of the utility is stopped.

System programmer response

Change the PROCLIB member that was used to start the WLM-managed stored procedure address space to specify NUMTCB=1. Then, refresh the WLM environment and run the utility again.

Severity

8 (error)

Related tasks

Setting up a WLM application environment for stored procedures during installation (Db2 Installation and Migration)

Related reference

Installation information for procedures and functions that are supplied with Db2 (Db2 Installation and Migration)

DSNUTILU stored procedure (Db2 SQL)

DSNU023I ***csect-name*** **- A WLM ENVIRONMENT FOR A UTILITIES STORED PROCEDURE USES A SYSIN DATA SET WITH RECFM=*recfm* AND LRECL=*lrecl*. THOSE DATA SET CHARACTERISTICS ARE INCORRECT FOR UTILITIES.**

Explanation

One fo the following Db2-supplied utility stored procedures invoked a utility:

- DSNUTILS
- DSNUTILU

DSNUTILU stored procedure invoked a utility. Utilities that run under the utility stored procedures require that the SYSIN data set is defined with a record format of V or VB, and a record length of 32708. A routine that ran in the stored procedure address space before DSNUTILU set the record format or record length to other values.

csect-name
The name of the control section that issued the message.

recfm
The record format of the SYSIN data set.

lrecl
The record length of the SYSIN data set.

System action

The utility that the utility stored procedure invoked does not run.

User response

Run the VARY REFRESH command to refresh the WLM environment. Then rerun the application that calls the utility stored procedure.

To prevent the problem in the future, take one of the following actions:

- Use the WLM environment only for running the utility stored procedures.
- Add a SYSIN DD statement like the following one to the WLM environment startup procedure, to set the record format and record length to the correct values:

```
//SYSIN    DD    UNIT=SYSDA,SPACE=(4000,
(20,20),,,ROUND),
//         DCB=(RECFM=V,LRECL=32708)
```

Severity

8 (error)

Related reference

DSNUTILS stored procedure (deprecated) (Db2 SQL)

DSNUTILU stored procedure (Db2 SQL)

DSNU024I ***csect-name*** **PARM FIELD ERROR** ***parm-field***

Explanation

An error was detected in the PARM field on the EXEC statement.

csect-name
The name of the control section that issued the message.

parm-field
The input parameter field that contained the error.

System action

Utility processing is not initiated.

User response

Correct the indicated parameter field on the EXEC DD statement, and resubmit the job.

Problem determination

Check the syntax of the EXEC DD statement.

Severity

8 (error)

Related concepts

Utility control statements (Db2 Utilities)

Related tasks

Invoking a Db2 online utility by creating the JCL data set yourself (Db2 Utilities)

DSNU025I ***csect-name*** **INVALID RESTART PARAMETER (restart)**

Explanation

Only the following values may be specified for the *restart* parameter: *NO* or *null*, CURRENT, or PHASE.

System action

The utility is not run by the stored procedure.

User response

Correct and re-run.

Severity

8 (error)

DSNU028I ***csect-name*** **UNABLE TO CONNECT TO DB2, REASON=X*reason code***

Explanation

A connection to the Db2 subsystem failed. 'reason-code' is the Db2 reason code that was returned.

System action

The utility job is terminated.

User response

Check the subsystem ID specified in the EXEC DD statement. If it is correct, the subsystem was not ready for processing. Ask the system programmer when the requested subsystem will again be available for processing.

Severity

8 (error)

DSNU030I ***csect-name*** **UNABLE TO ALLOCATE *dsn*, RC=*rr*, CODE=*ccc***

Explanation

The utility was unable to allocate a necessary image copy data set. *dsn* is the data set name that the utility attempted to dynamically allocate. *rr* is the return code from the MVS dynamic allocation service, and *ccc* is the reason code associated with the return code.

System action

The utility proceeds along one or the following paths:

If the data set was an incremental image copy data set, the utility proceeds as if it and any later incremental image copies did not exist.

If the data set was a full image copy data set, the utility attempts to use the most recent prior full image copy data set.

If the data set is used by the COPYTOCOPY utility, and the utility job step includes an OPTIONS control statement with the EVENT(ITEMERROR,SKIP) option, COPYTOCOPY processes the next item in the list.

The allocation failure may create other problems that will cause the utility to fail. This is indicated by other messages.

System programmer response

If the utility fails because of the allocation error (as shown by a subsequent message), correct the error, then resubmit the job.

User response

If the job fails, contact the system programmer.

Problem determination

Refer to the appropriate MVS publication for a complete description of the possible return and reason codes from dynamic allocation.

DSNU031I **UNABLE TO *action dsn*, RC=*rc*, CODE=*rsn***

Explanation

A utility was unable to perform the indicated action on a data set.

action
The action that the utility was not able to perform. Possible values are UNALLOCATE or CATALOG.

dsn
The name of the data set that the utility was processing.

rc
The return code from the z/OS DYNALLOC (SVC 99) or CATALOG (SVC 26) service.

rsn
The reason code that is associated with the return code.

System action

If the errors are catalog errors from DYNALLOC and CATALOG, processing continues.

If the errors are DYNALLOC errors that are unrelated to the catalog, the utility job abends with reason code 00E40076.

User response

For CATALOG errors, see the CATALOG return codes to determine the action to take.

For DYNALLOC errors, see the DYNALLOC return codes to determine the action to take.

Related reference

Interpreting DYNALLOC return codes (MVS Programming Authorized Assembler Services Reference)

Related information

00E40076 (Db2 Codes)

Return Codes from CATALOG (DFSMSdfp Advanced Services)

DSNU032E I/O ERROR ON WORKFILE, *additional-information*

Explanation

An I/O error was encountered on a necessary OS/VS data set.

additional-information
A message that describes the error and the data set in error. This message is returned to the Db2 utility by SVC 68 (SYNADAF) from BSAM.

The data set might have been needed for an unload data set, image copy data set, or load or reorganization work file data set. The utility is stopped at the beginning of the phase that used the OS/VS data set.

System action

The utility job is abended. The utility job step is in the stopped state.

Operator response

Except in the case of an unload data set during the RELOAD phase, the job can be restarted if an undamaged output data set is provided.

Problem determination

Refer to the appropriate MVS publication for the format of the error message.

DSNU033I *csect-name* THE CONTROL STATEMENT DOES NOT IDENTIFY THE OBJECT ON WHICH THE UTILITY OPERATES

Explanation

In the utility control statement, a keyword or operand was specified before the name of the table space, index, index space, or list on which the utility operates.

csect-name
The name of the control section that issued the message.

System action

Parsing is discontinued and utility processing is terminated.

User response

Specify the object of the utility before any keywords or operands that relate to the object.

Problem determination

Check the syntax of the utility control statement.

Severity

8 (error)

Related concepts

Db2 online utilities (Db2 Utilities)

Db2 stand-alone utilities (Db2 Utilities)

DSNU034I DATA SET TYPE INVALID FOR DDNAME 'dddddddd'

Explanation

A required DD statement with DDNAME='dddddddd' was found to have a data set type which is not valid for this application.

System action

The utility is terminated with a return code 8.

System programmer response

Correct the JCL and resubmit the job.

User response

The data set must be capable of storing intermediate data that can be retrieved by Db2. Check that the data set is not specified as type DUMMY, SYSIN, or SYSOUT. If you require assistance in specifying a valid data set type, consult the system programmer.

Severity

8 (error)

DSNU035I ***csect-name*** **UNABLE TO FIND DD CARD FOR DDNAME, 'dddddddd'**

Explanation

A DD statement with ddname = 'dddddddd' was expected, but not found.

System action

The utility is terminated with a return code 8.

System programmer response

Correct the JCL and resubmit the job.

User response

If the DDNAME is one you submitted, review and correct it. If the DDNAME was not provided by you, but by the system, consult the system programmer.

Severity

8 (error)

DSNU036I ***csect-name*** **UNABLE TO OPEN DCB FOR DDNAME *dddddddd***

Explanation

The DCB associated with DDNAME 'dddddddd' could not be opened.

System action

The utility job is abended with a reason code of X'00E40070'. The utility job step is in the stopped state.

System programmer response

Correct the job control language and resubmit the job.

User response

If the ddname is one you submitted, review and correct it. If the ddname was not provided by you but by the system, consult the system programmer.

DSNU037I ***csect-name*** **- RECFM=U FOR DDNAME *dddddddd***

Explanation

A data set to be used by the utility has an undefined record format RECFM=U. All data sets must be fixed or variable, blocked or unblocked.

System action

The utility job is abended with a reason code of X'00E40070'. The utility job step is in the stopped state.

Operator response

Notify the system programmer.

System programmer response

Ensure that no data sets involved in the utility job have RECFM=U. Resubmit the job after ending the stopped utility by the TERM UTILITY command, or do a RESTART(PHASE) of the stopped utility.

DSNU038I ***csect-name*** **BLOCK SIZE FOR DCB, DDNAME *dddddddd*, IS TOO SMALL, MUST BE AT LEAST *bbbbb* BYTES**

Explanation

The data set with DDNAME 'dddddddd' has a block size that is too small to accommodate a record that needs to be written.

System action

The utility job is abended with a reason code of X'00E40079'. The utility job step is left in the stopped state.

User response

Delete the data set in error. Change the JCL so that the block size for the data set with DDNAME 'dddddddd' is at least 'bbbbb' bytes. Resubmit the utility job with the RESTART(PHASE) option.

DSNU039I ***csect-name*** **- LRECL=0 FOR DDNAME *dd-name***

Explanation

A data set that is to be used by the Db2 utility has a record length of zero after OPEN.

csect-name
The name of the control section that issued the message.

dd-name
The name of the data definition statement.

Data sets with any of the following record formats must have a valid record length greater than zero:

- Fixed
- Fixed blocked
- Variable

- Variable blocked

System action

The utility job abends with reason code 00E40070. The utility job step is left in the stopped state.

Operator response

Notify the user or system programmer.

System programmer response

Correct the data set definition, or add DCB information to the JCL. Do a RESTART(PHASE) of the stopped utility, or resubmit the job after issuing a -TERM UTILITY command for the stopped utility.

User response

If the DDNAME is for a data set that you submitted, review and correct it. It might be necessary to provide a valid LRECL in the DCB parameter in the JCL. If the DDNAME was not provided by you but by the system, consult the system programmer.

Related tasks

Restarting an online utility (Db2 Utilities)

Related reference

-TERM UTILITY (Db2) (Db2 Commands)

Related information

00E40070 (Db2 Codes)

DSNU040I ***csect-name*** **ERROR ACCESSING DDNAME *ddname*, DECB=Xhex string**

Explanation

An error has occurred during BSAM access of a utility temporary file identified by 'ddname'. The DECB indicating the error is given as a hexadecimal string.

System action

The executing utility issues an X'04E' abend with abend reason code '00E40071' following this message.

Operator response

An operator with SYSOPR authority can issue the -TERM UTILITY command to release the resources claimed by the stopped utility (this may not be necessary).

User response

Refer to the information given in the Problem Determination section of this message. Correct the problem. Either issue the -TERM command to terminate the utility job and resubmit it, or specify the RESTART parameter and resubmit it.

Problem determination

The DECB provided contains the ECB in the first four bytes. The first byte of the ECB contains status bits that indicate the cause of the error. Refer to the appropriate MVS publication for the meaning of the status bits.

DSNU041I ***csect-name*** **INVALID CONCATENATED DATA SET FOR DDNAME *dddddddd***

Explanation

A non-input concatenated data set was detected. Only input data sets can be concatenated.

System action

The utility job abended with reason code X'00E40070'. The utility job step is in the stopped state.

Operator response

Notify the system programmer.

System programmer response

Remove the concatenated data sets from the data set with DDNAME 'ddddddddd'. Resubmit the job after ending the stopped utility with the TERM UTILITY command, or restart the utility at the beginning of the stopped phase by using RESTART(PHASE).

DSNU042I ***csect-name*** **SORT PHASE STATISTICS. NUMBER OF RECORDS=*n* ELAPSED TIME=*hh/mm/ss***

Explanation

This message provides statistics on the SORT phase of a utility. The number of records sorted, 'n', and the duration of the SORT phase in hours, minutes, and seconds are provided.

System action

The system continues to process normally.

Severity

0 (informational)

DSNU044I ***csect-name*** **ERROR FROM SORT COMPONENT RC=*n*, UTILITY STOPPED**

Explanation

A nonzero return code 'n' was returned from an MVS sort. Error messages from sort are printed on the UTPRINT data set.

System action

The executing utility job is placed in the stopped state.

Operator response

An operator with SYSOPR authority can issue the -TERM UTILITY command to release the resources claimed by the stopped utility (this may not be necessary).

User response

Determine the cause of the error. If the error can be corrected, the utility may be restarted from the beginning of the sort phase by using the RESTART(PHASE) option. If the error is such that the utility cannot complete, the -TERM command should be issued to remove the stopped utility from the system. The -TERM utility option should rarely be exercised when the stopped utility is REORG.

Problem determination

This abend is accompanied by abend reason code X'00E40005', and an SVC dump is requested. In most cases, error messages from MVS sort identify the problem and the dump is not needed. If sort is unable to open the UTPRINT data set, only the message and the abend are provided. For example, if the UTPRINT DD statement is omitted, correct the problem with UTPRINT, and resubmit the job.

DSNU046I ***csect-name*** **UTILITY STATEMENT IS TOO LONG OR TOO COMPLEX**

Explanation

The utility command and associated control statements have caused internal fields to exceed Db2 subsystem limits.

System action

Utility processing is not initiated.

User response

Reduce the size or complexity of the utility statement where possible. For example, a LOAD into several tables may be broken up into a separate load statement for each table or the size of comparison fields for WHE, CONTINUEIF, and NULLIF operands may be reduced in size.

Severity

8 (error)

Related concepts

Db2 online utilities (Db2 Utilities)

Db2 stand-alone utilities (Db2 Utilities)

Related reference

Limits in Db2 for z/OS (Db2 SQL)

DSNU047I ***csect-name*** **A REQUIRED DD CARD OR TEMPLATE IS MISSING. NAME=*missing-dd***

Explanation

The Db2 utility being executed requires a data set to continue processing. The DDNAME or TEMPLATE name for the missing data set is provided.

System action

Utility processing terminates.

Operator response

Notify the system programmer.

System programmer response

Correct the JCL to include the indicated DD statement or add a TEMPLATE control statement.

Severity

8 (error)

Related tasks

Invoking Db2 online utilities (Db2 Utilities)

Invoking stand-alone utilities (Db2 Utilities)

Related reference

Syntax and options of the TEMPLATE control statement (Db2 Utilities)

Sample TEMPLATE control statements (Db2 Utilities)

DSNU048I ***csect-name*** **INVALID OPERAND FOR KEYWORD *invalid-keyword***

Explanation

The utility parser has determined that the operand specified for keyword *invalid-keyword* is invalid.

System action

Utility processing is not initiated.

User response

Correct the operand in error, and resubmit the utility job.

Severity

8 (error)

Related concepts

Db2 online utilities (Db2 Utilities)

Db2 stand-alone utilities (Db2 Utilities)

DSNU049I ***csect-name* - INVALID OPERAND *invalid-operand* FOR KEYWORD *keyword-name***

Explanation

The utility parser has determined that operand *invalid-operand* cannot be specified for keyword *keyword-name*. This includes a negative value following the keywords MAXRO or DELAY.

System action

Utility processing is not initiated.

User response

Correct the operand in error, and resubmit the utility job.

Severity

8 (error)

Related reference

Syntax and options of the REORG INDEX control statement (Db2 Utilities)

Syntax and options of the REORG TABLESPACE control statement (Db2 Utilities)

DSNU050I ***csect-name utility-statement***

Explanation

This message echoes the utility statement that was input from SYSIN.

csect-name
The name of the control section that issued the message.

utility-statement
The text of the utility statement.

If the RUNSTATS utility used a statistics profile, the control statement might contain references to the nonexistent objects `THIS.TABLE` and `THIS.TS`, which did not appear in the submitted control statement. Such references are added only when they are required to form a complete utility control statement and are otherwise meaningless.

System action

Utility processing continues.

Severity

0 (informational)

Related concepts

Utility control statements (Db2 Utilities)

Statistics profiles (Db2 Performance)

Related information

DSNU650I

csect-name control-statement-text

DSNU051I ***csect-name* INSUFFICIENT OPERANDS FOR KEYWORD *keyword-name***

Explanation

An operand that is required when the keyword *keyword-name* is specified was omitted.

System action

Utility processing is not initiated.

User response

Correct the operand specification, and resubmit the job.

Severity

8 (error)

Related concepts

Db2 online utilities (Db2 Utilities)

Db2 stand-alone utilities (Db2 Utilities)

DSNU052I ***csect-name* KEYWORD *keyword-name* INCOMPATIBLE WITH OTHER KEYWORDS OR OPERANDS**

Explanation

The specified keyword *keyword-name* cannot be used with other keywords or operands.

System action

Processing terminates.

User response

Correct or remove the invalid keyword, and resubmit the job.

Severity

8 (error)

Related concepts

Db2 online utilities (Db2 Utilities)

Db2 stand-alone utilities (Db2 Utilities)

DSNU053I ***csect-name*** **FIELD** ***cccccccc*** **NOT FOUND**

Explanation

This error is caused by one of the following situations:

- Column name *cccccccc* is not a column name in the target table.
- A field name in a WHEN clause does not match a column name in the target table.
- The INCURSOR option was used to specify a cursor for the LOAD utility input data set. Db2 replaced expressions in the SELECT list of the cursor with new column names, such as DSN_SELECT_CLAUSE_EXPRESSION, which did not match column names in the target table.

System action

Utility processing is not initiated.

User response

Correct the LOAD utility statement, and resubmit the job.

If the error is caused by the existence of an INCURSOR option with expressions in the SELECT list of the cursor, rename expressions in the SELECT list by using the AS keyword.

Problem determination

Valid column names can be found in the SYSIBM.SYSCOLUMNS table.

Severity

8 (error)

DSNU054I ***csect-name*** **TABLESPACE** ***ssssssss*** **NOT FOUND**

Explanation

The operand of the TABLESPACE keyword, 'ssssssss', did not specify an existing table space name.

System action

Utility processing is not initiated.

User response

Correct the table space name and/or database name, and resubmit the job.

Problem determination

Valid table space names can be found in the SYSIBM.SYSTABLESPACE catalog table.

Severity

8 (error)

DSNU055I ***csect-name*** **INDEX** ***iiiiiiii*** **NOT FOUND**

Explanation

The index name specified, 'iiiiiiii', was invalid.

System action

Utility processing is not initiated.

User response

Correct the index name, and resubmit the job.

Problem determination

Valid index names can be found in the SYSIBM.SYSINDEXES catalog table.

Severity

8 (error)

DSNU056I ***csect-name*** **TABLE** ***table-name*** **NOT FOUND**

Explanation

A utility job specified an invalid table name.

csect-name
The name of the control section that issued the message.

table-name
The name of the table.

This message occurs when:

- No table exists with the specified name.

- In the case of the UNLOAD utility, the table was identified with a view or alias. The UNLOAD utility cannot unload from a view or alias whose base table is remote.

System action

The utility job step is terminated, and resources are released to their prior state.

User response

Correct the table name, the database name, or both, and resubmit the utility job step.

Problem determination

To confirm table names, query the SYSIBM.SYSTABLES catalog table.

Severity

8 (error)

Related concepts

Db2 online utilities (Db2 Utilities)

Related reference

SYSTABLES catalog table (Db2 SQL)

DSNU057I ***csect-name*** **DATABASE** ***database-name*** **NOT FOUND**

Explanation

The operand of the DATABASE keyword, 'database-name', did not specify an existing database name.

System action

The error is sufficient to terminate further processing of the utility job step. The utility job step is terminated, and resources are released to their prior state.

User response

Correct the database name and resubmit the utility job step.

Problem determination

The correct database names can be found by querying the SYSIBM.SYSDATABASE catalog table.

Severity

8

DSNU058I ***csect-name utility-name*** **UTILITY NOT ALLOWED AGAINST AN OBJECT IN RECOVER PENDING STATE**

Explanation

An attempt has been made to execute a utility against an object that is in RECOVER PENDING STATE. CHECK, COPY, MODIFY, LOAD, QUIESCE, REORG, and RUNSTAT are not allowed.

System action

Utility processing is not initiated.

System programmer response

Determine which of the three utilities, LOAD REPLACE, RECOVER, or REPAIR, should be used to remove the object from the RECOVER PENDING STATE.

User response

Remove the object from the RECOVERY PENDING STATE by using either LOAD REPLACE, RECOVER, or REPAIR against the object. Resubmit the job.

Severity

8 (error)

DSNU059I ***csect-name utility-name*** **UTILITY NOT ALLOWED TO RUN ON A ROSHARE READ DATABASE**

Explanation

An attempt was made to execute a utility on a ROSHARE READ database. Only the RUNSTATS, DIAGNOSE, and REPAIR DBD utilities are allowed to run on read-only shared databases.

System action

Utility processing is not initiated.

User response

Resubmit the utility job on the owning system, if necessary.

Severity

8 (error)

DSNU060I ***csect-name*** **USER** ***userid*** **NOT AUTHORIZED FOR** ***util-name*** **UTILITY ON DATABASE** ***dbase-name***

Explanation

User *userid* attempted to execute a utility *util-name* against an object in database *dbase-name*. The user was not authorized to execute utilities for database *dbase-name*, the user's authorization did not include this utility, or the user's authorization did not have a valid seclabel.

System action

Utility processing is not initiated.

System programmer response

Determine why the user was denied access. Either the authorization should be corrected, or another authorized user should invoke the utility. When LISTDEF was used, it can be ignored if the user wanted to execute utility on the object(s) he or she owns in implicit database with owner privilege.

User response

Ensure that the correct database was specified. If this operation involves a table with multilevel security with row granularity, then you need to have a valid security label to execute this utility.

Problem determination

The following catalog tables can be examined to determine who has proper authority: SYSIBM.SYSUSERAUTH, SYSIBM.SYSDBAUTH, SYSIBM.SYSRESAUTH, SYSIBM.SYSINDEXES (ownership), or SYSIBM.SYSTABLESPACE (ownership).

Severity

12 (severe error)

DSNU061I ***csect-name*** **USER** ***userid*** **NOT AUTHORIZED, UTILID=*utilid***

Explanation

The named user issued a utility command and was not authorized to do so.

The -TERM UTILITY command can only be issued by:

- The submitter of the utility job.
- Users with SYSOPR, SYSADM, or SYSCTRL authority.
- Users with DBADM, DBCTRL, or DBMAINT authority over every database used by the utility.

  Even for users with sufficient database authority, the TERM UTILITY command will fail in these situations:

  – The user issued the command before the utility determined what databases it would access.

  – The utility job included the DIAGNOSE, REPORT, or STOSPACE utility. Those utilities must be terminated by the submitter of the job or by a holder of SYSOPR, SYSCTRL, or SYSADM authority.

Any user can issue a -DISPLAY UTILITY command.

System action

The -TERM UTILITY request for utility identifier *utilid* is rejected.

User response

Take the appropriate action:

- Wait to allow the utility to identify the databases it will access; then reissue the command.
- Obtain the required authorization and reissue the command.
- Have another user with proper authorization issue the command.

DSNU062I ***csect-name util-name*** **UTILITY MAY NOT BE RUN ON OBJECT** ***qualifier.object-name***

Explanation

An attempt was made to execute utility 'util-name' against object 'qualifier.object-name'. This is not allowed. The named object cannot be processed by the named Db2 utility.

System action

The utility job is terminated.

User response

Remove the invalid utility control statements and resubmit the job.

Severity

8 (error)

DSNU063I ***csect-name utility-name*** **UTILITY NOT ALLOWED AGAINST AN OBJECT IN REBUILD PENDING STATE**

Explanation

An attempt has been made to execute a utility against an object that is in REBUILD PENDING STATE. CHECK, COPY, MODIFY, LOAD, QUIESCE, REORG, and RUNSTAT are not allowed.

System action

Utility processing is not initiated.

System programmer response

Rebuild the index with the REBUILD utility to remove the object from REBUILD PENDING state.

User response

Remove the object from the REBUILD PENDING STATE by using either LOAD REPLACE, RECOVER, or REPAIR against the object. Resubmit the job.

Severity

8 (error)

DSNU064I ***csect-name*** **UTILITY NOT ALLOWED AGAINST SYSTEM DATABASE**

Explanation

An attempt was made to execute a utility against database DSNDB01 or DSNDB06. The following utilities are not allowed against DSNDB01:

- LOAD
- REORG TABLESPACE against SYSUTILX (allowed against other DSNDB01 table spaces)
- CHECK DATA
- REPAIR DBD
- RUNSTATS
- MODIFY STATISTICS

The following utilities are not allowed against DSNDB06:

- LOAD (except SYSIBM.SYSSTRINGS)
- CHECK DATA
- REPAIR DBD

System action

Execution of the utility job is stopped.

User response

Remove the invalid utility control statements and resubmit the job.

Severity

8 (error)

DSNU065I ***csect-name*** **UTILITY NOT ALLOWED AGAINST A WORK FILE**

Explanation

An attempt has been made to execute a utility against a work file database, such as DSNDB07, or the TEMP database. Utilities cannot be run on objects in the work file or TEMP databases.

csect-name
The name of the control section that issued the message.

System action

Execution of the utility job is stopped.

User response

Remove the invalid utility control statements and resubmit the job.

Severity

8 (error)

DSNU066I ***csect-name*** **OPERAND** ***oooooo*** **NOT ALLOWED FOR** ***uuuuuu*** **UTILITY against** ***tttttt*** **TABLE**

Explanation

An attempt was made to specify the REPLACE option when executing the LOAD utility on a Db2 catalog table. It is not permissible to replace existing rows in a Db2 catalog table. Rows can only be added to the existing rows in a Db2 catalog table.

System action

Utility processing is not initiated.

User response

Correct the operand, and resubmit the job.

Severity

8 (error)

DSNU067I ***csect-name*** **- TABLE SPACE** ***table-space-name*** **IS NOT A LOB TABLE SPACE**

Explanation

The table space specified, *table-space-name*, is not a LOB table space. The object of the utility must be LOB table space.

System action

Utility returns completion code=8.

Programmer response

Correct the utility statement.

DSNU068I **KEYWORD NOT SUPPORTED FOR *lob-or-xml* TABLESPACE**

Explanation

The keyword specified in the utility statement is not supported for the XML or LOB table space indicated by the *lob-or-xml* variable. Also, the *lob-or-xml* reported by the message cannot be explicitly named in the utility statement.

System action

Utility execution is terminated.

User response

Correct the utility statement.

Severity

8 (error)

DSNU069I ***csect-name* - AUXILIARY TABLE *table-name* NOT PERMITTED AS EXCEPTION TABLE**

Explanation

A auxiliary table was specified as an exception table.

System action

Utility returns completion code=8.

Programmer response

Specify an exception table that is not an auxiliary table.

DSNU070I ***csect-name* KEYWORD OR OPERAND *x* INVALID WITH *y***

Explanation

The use of a keyword or operand in a utility control statement is inconsistent with another keyword or operand.

csect-name
The name of the control section that issued the message.

System action

The control statement in error is rejected and processing is halted.

User response

Correct the control statement in error and resubmit the job.

For example, the REORG TABLESPACE utility issues this message when the AUTOESTSPACE option is used and the table space is not organized by hash. In this case, remove the inconsistent option.

Severity

8 (error)

Related concepts

Db2 online utilities (Db2 Utilities)

Related reference

Syntax and options of the REORG TABLESPACE control statement (Db2 Utilities)

DSNU071I ***csect-name* KEYWORD *x* REQUIRES KEYWORD *y***

Explanation

A utility control statement is missing a required keyword. When keyword *x* is specified, keyword *y* must also be specified.

csect-name
The name of the control section that issued the message.

x* and *y
Utility keywords.

System action

The utility statement is rejected, and processing is halted.

User response

Correct the utility control statement in error, and resubmit the job.

Severity

8 (error)

Related concepts

Utility control statements (Db2 Utilities)

DSNU072I ***csect-name* INVALID KEYWORD(S) SPECIFIED FOR TABLESPACE LIST**

Explanation

The specified keyword cannot be included in a list of table spaces.

System action

Processing terminates.

User response

Remove the specified keyword from the list of table spaces.

Severity

8 (error)

DSNU073I ***csect-name*** **- KEYWORD** ***keyword*** **IGNORED**

Explanation

An unsupported or inapplicable keyword was specified in the utility statement.

keyword
The keyword that was specified.

System action

Processing continues.

User response

Ensure that this behavior is intended. If you do not want this keyword to be ignored, correct the syntax.

To avoid this message in the future, remove the keyword.

Severity

0 (informational)

Related concepts
Db2 online utilities (Db2 Utilities)
Db2 stand-alone utilities (Db2 Utilities)

DSNU074I **UTILITY NOT SUPPORTED FOR** ***object-type*** **TABLE SPACE**

Explanation

The utility statement failed because the table space specified was a LOB or XML table space, and the utility does not support they type of table space indicated.

System action

The statement cannot be executed.

Programmer response

Correct the utility statement.

DSNU075I ***csect-name*** **- TABLE=*schema-name.table-name*, LOB COLUMN=*column-name*, PARTITION: *partition-number* - DEFINITION IS NOT COMPLETE**

Explanation

The definition of the LOB column is not complete.

csect-name
The name of the control section that issued the message.

schema-name.table-name
The name of the table, qualified by the name of the table schema or creator.

column-name
The name of the LOB column.

partition-number
If the object is partitioned, the partition number that contains the incomplete definition.

The phrase `PARTITION: partition-number` is present in the message text only if the object is partitioned.

System action

If the utility is able to continue processing, it does so and issues this message with a severity of 4. Otherwise, utility processing terminates and this message is issued with a severity of 8.

Programmer response

Complete the LOB column definitions. A LOB column definition is not complete until the LOB table space, auxiliary table, and index on the auxiliary table have been created for the LOB column.

If the table space is partitioned, make sure that the LOB definition is complete for all partitions.

Severity

4 (warning)

8 (error)

DSNU076I ***csect-name*** **- KEYWORD=*keyword* INVALID FOR *object-description* TABLE SPACE=*database-name.tablespace-name***

Explanation

A utility statement included a keyword that is not valid for the type of object.

csect-name
The name of the control section that issued the message.

keyword
The invalid keyword that was specified for the utility.

object-description
A description of the object attributes that make the keyword invalid.

database-name.tablespace-name
The name of the table space that the utility was attempting to process.

System action

The utility terminates with a completion code 8.

Programmer response

Correct the utility statement.

DSNU077I ***csect-name - utility* IS PROHIBITED BECAUSE *object* IS *pending-state***

Explanation

The *utility* specified is prohibited because the *object* is in a *pending-state*.

System action

Utility terminates and returns completion code=8.

Programmer response

- Run the CHECK LOB utility if the object is a LOB table space and the state is CHECK PENDING.
- Run the REBUILD INDEX utility if the object is an auxiliary index and the state is REBUILD PENDING.
- Run the CHECK INDEX utility if the object is an auxiliary index and the state is CHECK PENDING.

Severity

8 (error)

DSNU078I ***csect-name* INVALID DBCS IDENTIFIER *dbcs-id***

Explanation

The DBCS identifier *dbcs-id* is invalid. Reason codes are:

101
An odd number of bytes exists between the shift-out and the shift-in

102
No shift-in was found at the end of the identifier

103
DBCS blanks X'4040' are not allowed

104
There are no characters between the shift-out and the shift-in

105
Shift-out can not be the first byte of the DBCS character between the shift-out and the shift-in.

System action

Processing is terminated.

User response

Correct the DBCS identifier and resubmit the job.

Severity

8 (error)

Related concepts
SQL identifiers (Db2 SQL)
Language elements (Db2 SQL)

DSNU079I ***csect-name* UNBALANCED PARENTHESES IN CONTROL STATEMENT**

Explanation

The utility parser has determined that there are unbalanced parentheses in the input string.

System action

Utility processing is not initiated.

User response

Determine the location of the missing parenthesis and insert it. The utility job can then be resubmitted.

Severity

8 (error)

Related concepts
Utility control statements (Db2 Utilities)
Db2 online utilities (Db2 Utilities)
Db2 stand-alone utilities (Db2 Utilities)

DSNU080I ***csect-name* NO UTILITY STATEMENTS FOUND IN *dd-name***

Explanation

The data set identified by dd-name did not contain any text. The system might have processed the end of file prematurely, or this job requires that the utility statements be skipped.

System action

Processing continues.

User response

If the data set is SYSIN, provide at least one utility statement, if none now exists, or verify that this job executes no utility statements. If the data set is the LISTDEF (SYSLISTD) or TEMPLATE (SYSTEMPL) data set, provide the required control statements in that data set or in SYSIN.

Severity

4 (warning)

DSNU081I ***csect-name*** **OPERAND** ***operand-name*** **EXCEEDS KEYWORD** ***keyword-name*** **MAXIMUM LENGTH**

Explanation

The utility parser has determined that operand *operand-name* exceeds the maximum length for keyword *keyword-name*.

System action

Utility processing is not initiated.

User response

Correct the operand, and resubmit the job.

Severity

8 (error)

Related concepts

Db2 online utilities (Db2 Utilities)

Db2 stand-alone utilities (Db2 Utilities)

Related reference

Limits in Db2 for z/OS (Db2 SQL)

DSNU082I ***csect-name*** **INVALID KEYWORD** ***kkkkkkkk***

Explanation

The given keyword was not recognized within the context of this control statement.

System action

Utility processing is not initiated.

User response

Correct the keyword, and resubmit the job.

If this message contains an indecipherable keyword, see the information about utility control statements and the rules about encoding them in EBCDIC or Unicode.

Severity

8 (error)

Related concepts

Utility control statements (Db2 Utilities)

DSNU083I ***csect-name*** **INVALID HEXADECIMAL OPERAND** ***hhhhhhhh***

Explanation

The utility parser has determined that the operand *hhhhhhhh* is invalid as a hexadecimal operand. It contains one of the following errors:

- the operand contains a character that is not hexadecimal
- it has an odd number of characters
- for a UX or GX string constant, it consists of a number of characters that is not a multiple of 4

System action

Utility processing is not initiated.

User response

Correct the keyword, and resubmit the job.

Severity

8 (error)

DSNU084I ***csect-name*** **INVALID GRAPHIC OPERAND** ***gggg***

Explanation

The utility parser has determined that the operand 'gggg' is invalid as a hexadecimal operand. The graphic operand is either missing one or both of the shift characters or is not an even number of characters.

System action

Processing is terminated.

User response

Correct the utility statement, and resubmit the job.

Severity

8 (error)

DSNU085I ***csect-name*** **INVALID SPECIAL CHARACTER OPERAND** ***ssss***

Explanation

The utility parser has determined that the operand 'ssss' is invalid as a special character operand. For a special character operand to be invalid, it must have either a shift-out or a shift-in character and be missing the corresponding shift character, or not have an even number of characters between the shift-out, shift-in characters.

System action

Processing is terminated.

User response

Correct the utility statement, and resubmit the job.

Severity

8 (error)

DSNU086I ***csect-name ttttt*** **I/O ERRORS ON SPACE=** ***ddddddddd*****. DATA SET NUMBER=** ***nnn*****. I/O ERROR PAGE RANGE=** ***aaaaaa, bbbbbb*****.**

Explanation

Db2 detected an error. This message is issued for, but not limited to the following reasons:

- I/O errors were detected on the named object. *ttttt* is either 'READ' or 'WRITE'. *nnn*; is the data set number. *aaaaaa* is the first damaged page and *bbbbbb* is the last damaged page of the data set.
- A broken page was detected.
- A page parity error was detected for a 'must complete' agent.
- A read or write I/O error was detected. A LPL recovery might be in progress so the page is added to the WEPR instead of the LPL.

System action

Processing continues, but the pages within the error range are no longer accessible.

This message is non-scrollable. It remains highlighted on the console until you take the appropriate action.

System programmer response

Determine the appropriate level of recovery, and invoke the recovery utility. If user-defined data sets are being used and full data set or table space RECOVER is to be used, then, prior to invoking the RECOVER utility, the table space must be stopped, new data set(s) defined, and the table space restarted. If the data set is part of a ROSHARE READ database, determine whether it was a link or DASD failure. It there was a link failure, then fix the link, and issue a -START DATABASE with the ACCESS(FORCE) parameter. If the error was caused by a DASD failure, then correct the problem from the system on which the database was defined as ROSHARE OWNER.

Problem determination

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data). for a discussion of database recovery procedures.

An IOS (I/O subsystem) message might be included on the MVS console SYSLOG indicating the type of I/O error that occurred. If an IOS message was issued, follow the Problem Determination directions for the message.

Severity

0 (informational)

DSNU087I ***csect-name*** **INVALID OPERAND TYPE FOR KEYWORD** ***keyword-name - invalid-operand***

Explanation

The utility parser has determined that the operand *invalid-operand* is the wrong type for the keyword *keyword-name*. An example of such an error would be a decimal operand where only a hexadecimal operand is allowed.

System action

Utility processing is not initiated.

User response

Correct the keyword, and resubmit the job.

Severity

8 (error)

Related concepts

Db2 online utilities (Db2 Utilities)

Db2 stand-alone utilities (Db2 Utilities)

DSNU088I ***csect-name*** **INVALID CHARACTER OPERAND** ***invalid-operand***

Explanation

The utility parser has determined that the operand *invalid-operand* is invalid as a character operand.

System action

Utility processing is not initiated.

User response

Correct the keyword, and resubmit the job.

Severity

8 (error)

Related concepts

Db2 online utilities (Db2 Utilities)

Db2 stand-alone utilities (Db2 Utilities)

DSNU089I ***csect-name*** **OPERAND** ***invalid-operand*** **IS TOO LONG**

Explanation

The utility parser has determined that the operand *invalid-operand* is too long for the keyword specified.

System action

Utility processing is not initiated.

User response

Correct the keyword, and resubmit the job.

Problem determination:

Severity

8 (error)

Related concepts

Db2 online utilities (Db2 Utilities)

Db2 stand-alone utilities (Db2 Utilities)

DSNU090I ***csect-name*** **DD OR TEMPLATE NAME** ***nnn*** **IS INVALID FOR KEYWORD** ***kkk***

Explanation

The DDNAME or TEMPLATE *nnn* was used as an improper input of the specified keyword *kkk* or from one of the reserved ddnames: SYSIN, SYSPRINT, UTPRINT, SORTWKnn, SORTLIB.

System action

Processing terminates.

User response

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Severity

8 (error)

DSNU091I ***csect-name*** **DDNAME** ***nnn*** **IS A DUPLICATE**

Explanation

The DDNAME 'nnn' was used as operand in the input statement more than once.

System action

Processing terminates.

User response

Change the ddname to a different one.

Severity

8 (error)

DSNU092I ***csect-name*** **NUMBER OF OPERANDS FOR KEYWORD** ***keyword-name*** **EXCEEDS MAXIMUM**

Explanation

The keyword *keyword-name* contains more than the maximum number of operands.

System action

Processing terminates.

User response

Correct the number of operands for the specified keyword.

Severity

8 (error)

Related concepts

Db2 online utilities (Db2 Utilities)

Db2 stand-alone utilities (Db2 Utilities)

DSNU093I ***csect*** **- INVALID CHARACTER STRING** ***string*** **IN CONTROL STATEMENT**

Explanation

An invalid character string *string* was found in a utility control statement where a keyword, operand, operator or punctuation was expected.

System action

Processing terminates.

User response

Correct the utility control statement, and resubmit the job.

Severity

8 (error)

DSNU094I ***csect-name*** **KEYWORD 'wwwww' IS DUPLICATED**

Explanation

The keyword 'wwwww' is not allowed twice.

System action

The control statement in error is rejected and the processing is halted.

User response

Correct the control statement in error, and resubmit the job.

Severity

8

DSNU095I ***csect-name*** **UTILITY** ***uuuuuuuu*** **INCONSISTENT WITH LAST INVOCATION**

Explanation

This message can occur when a utility job step is restarted and a utility statement was modified, added or deleted from SYSIN.

System action

Utility processing is terminated. The utility job step remains in SYSIBM.SYSUTIL in the stopped state.

User response

Restart the utility job with the statements in the same order as they were in when the job was first run. If a statement was modified, change the statement back to the format in the original invocation and restart the job. Utility statements should not be altered for restart.

Severity

8 (error)

DSNU096I ***csect-name*** **OPERAND** ***operand*** **INCONSISTENT WITH LAST INVOCATION**

Explanation

When the utility job step was restarted, the indicated operand was found to be inconsistent with the restart point.

System action

The restart of utility processing is not initiated.

Operator response

An operator with SYSOPR authority can terminate the utility job step (this may not be necessary). A REORG utility that is beyond the UNLOAD phase should rarely be terminated.

User response

To restart, restore the operand to its prior definition. If this is not acceptable, terminate the utility job step, take corrective action, and resubmit the job.

Related concepts

Termination of REORG TABLESPACE (Db2 Utilities)

Termination of REORG INDEX (Db2 Utilities)

Restart of REORG INDEX (Db2 Utilities)

Restart of REORG TABLESPACE (Db2 Utilities)

Related reference

REORG TABLESPACE (Db2 Utilities)

REORG INDEX (Db2 Utilities)

DSNU097I ***csect-name*** **-** ***input-value*** **WILL BE REQUIRED SYNTAX IN FUTURE RELEASES**

Explanation

The identified *input-value* is not required in this release, but it will be part of the required syntax in future releases.

System action

Utility processing continues.

Programmer response

Check the syntax of the utility control statement.

Severity

4 (warning)

Related concepts

Db2 online utilities (Db2 Utilities)

Db2 stand-alone utilities (Db2 Utilities)

DSNU099I ***csect-name*** **- IRLM '*req-type*' REQUEST FAILED, IRLM RETURN CODE = X'*return-code*' IRLM REASON CODE = X'*reason-code*'**

Explanation

The request to the IRLM to obtain or release a lock failed for the reasons specified in *return-code* and *reason-code*. In a non data-sharing environment, the requested lock is the utility serialization lock. In a data sharing environment, the requested lock is the utility serialization lock, the utility identifier lock, or the utility execution lock. The type of request is indicated by *req-type*.

System action

Utility and command processing terminates.

System programmer response

Determine the cause of the IRLM error and take appropriate action.

User response

Refer to the IRLM messages and codes section for problem determination and the appropriate action. Restart the utility by specifying the RESTART parameter, or terminate the utility with the -TERM command and then resubmit the job. If this message was received during the -DIS UTIL, -TERM UTIL, or -START DATABASE ACCESS(FORCE) command, then the command can be reissued.

Problem determination

Obtain the system console log output, dump, and SYS1.LOGREC information. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Related concepts

IRLM return and reason codes (IRLM)

DSNU100I ***csect-name*** **USERID = *userid* MEMBER = *member-name* UTILID = *utilid* PROCESSING UTILITY STATEMENT *statement-number* UTILITY = *utility-name* PHASE = *utility-phase* COUNT = *object-count* NUMBER OF OBJECTS IN LIST = *list-size* LAST OBJECT STARTED = *last-started* STATUS = STOPPED JOBNAME = *job-name* TIME STARTED = *time-started***

Explanation

This message displays output from the DISPLAY UTILITY command.

The DISPLAY UTILITY output begins with one of the following messages, depending on the status of the first utility that is reported:

DSNU100I - A stopped utility
This message is displayed if the utility is stopped.

DSNU105I - An active utility
This message is displayed if the utility is active.

DSNU106I - A terminating utility
This message is displayed if the utility is in the process of terminating.

The initial DSNU100I, DSNU105I, or DSNU106I message can be followed by additional instances of these messages depending on the qualifying utility jobs.

The initial status messages are followed by one or more of the following messages:

- DSNU107I - Invalid member name
- DSNU108I - Invalid use of the MEMBER option
- DSNU111I - Subtask information
- DSNU116I - RECOVER utility LOGAPPLY phase
- DSNU347I - Deadline information for REORG INDEX or REORG TABLESPACE
- DSNU383I - LOG phase information for REORG INDEX or REORG TABLESPACE
- DSNU384I - MAXRO, LONGLOG, and DELAY information for REORG INDEX or REORG TABLESPACE
- DSNU285I - SWITCHTIME and NEWMAXRO information for REORG INDEX or REORG TABLESPACE
- DSN9022I - Normal completion

The following sections explain each of the messages that might be issued as a result of running the DISPLAY UTILITY command:

DSNU100I - A stopped utility

Message DSNU100I is displayed for each instance of a stopped utility.

```
DSNU100I  csect-name USERID = userid
                MEMBER = member-name
                UTILID = utilid
                PROCESSING UTILITY STATEMENT
statement-number
                UTILITY = utility-name
                PHASE = utility-phase   COUNT =
object-count
                NUMBER OF OBJECTS IN LIST =
list-size
                LAST OBJECT STARTED = last-
started
                STATUS =
STOPPED
                JOBNAME = job-name
                TIME STARTED = time-started
```

The specified utility job stopped during processing for one of the following reasons:

- The utility is REORG INDEX or REORG TABLESPACE, and the UNLOAD(PAUSE) option was specified. This option causes the utility to stop after it unloads the data. Therefore, the utility is stopped in the RELOAD phase.
- A Db2 subsystem failure or cancellation occurred. For example, a cancellation occurs if you issue the STOP DB2 command.

csect-name
The name of the control section that issued the message.

userid
The user ID that ran the utility job.

member-name
The name of the Db2 member in a data-sharing environment. In a non-data-sharing environment, *member-name* is blank.

utilid
The utility ID.

statement-number
The utility statement number.

utility-name
The name of the utility.

utility-phase
The phase in which the utility is to be restarted if the utility job step is restarted with the RESTART(PHASE) option. This value applies only to utilities that have phases.

object-count
The number of objects that were processed in a utility phase. The *object-count* field is relevant only to the following utilities:

CHECK INDEX, LOAD, REBUILD INDEX, REORG INDEX, and REORG TABLESPACE:
The *object-count* field indicates the number of records that were processed. For the LOG phase of REORG INDEX and REORG TABLESPACE, this value indicates the number of log records that were processed. For the SWITCH phase of REORG INDEX and REORG TABLESPACE, this value is 0.

COPY, MERGECOPY, RECOVER (RESTORE phase), and RUNSTATS:
The *object-count* field indicates the number of pages that were processed.

STOSPACE:
The *object-count* field indicates the number of table spaces or indexes that were processed.

For all other utilities, ignore the *object-count* field.

In a data sharing environment, the count is current when the command is issued from the same member on which the utility is executing. When the command is issued from a different member, the count might lag substantially. For some utilities in some build phases, the count number is not updated when the command is issued from a different member.

list-size
If the utility is processing a list of objects, the total number of objects in the list. This value might not be accurate in the UTILINIT phase, which occurs before the list size is determined.

last-started
If the utility is processing a list of objects, the item number of the last object for which processing started. This value might not be accurate in the UTILINIT phase, which occurs before the list size is determined.

job-name
The name of the job that invoked the utility. If a stored procedure invoked the utility, this value is the job name in the JCL that started the WLM-managed stored procedure address space.

time-started
The date and time when the utility started. The format is YYYY-MM-DD-HH:MM:SS.

Related information:

Syntax and options of the REORG INDEX control statement (Db2 Utilities)
Syntax and options of the REORG TABLESPACE control statement (Db2 Utilities)

-STOP DB2 (Db2) (Db2 Commands)
Restarting an online utility (Db2 Utilities)

DSNU105I - An active utility

Message DSNU105I is displayed for each instance of an active utility.

```
DSNU105I  csect-name USERID = userid
                MEMBER = member-
name
                UTILID =
utilid
                PROCESSING UTILITY STATEMENT
statement-number
                UTILITY = utility-
name
                PHASE = utility-phase   COUNT =
object-count
                NUMBER OF OBJECTS IN LIST =
list-size
                LAST OBJECT STARTED = last-
started
                STATUS =
ACTIVE
                JOBNAME = job-
name
                TIME STARTED = time-started
```

In addition to being part of the DISPLAY UTILITY output, message DSNU105I can also be displayed when you run the REORG INDEX or REORG TABLESPACE utility. In these cases, this message is displayed when either of these utilities estimates that the SWITCH phase will not start before the deadline that is specified in the DEADLINE option. The information in the message reflects the state at the time that this event occurred.

csect-name
The name of the control section that issued the message.

userid
The user ID that ran the utility job.

member-name
The name of the Db2 member in a data-sharing environment. In a non-data-sharing environment, *member-name* is blank.

utilid
The utility ID.

statement-number
The utility statement number.

utility-name
The name of the utility.

utility-phase
The phase in which the utility was executing when this message was issued. This value applies only to utilities that have phases.

object-count
The number of objects that were processed in a utility phase. The *object-count* field is relevant only to the following utilities:

CHECK INDEX, LOAD, REBUILD INDEX, REORG INDEX, and REORG TABLESPACE:
The *object-count* field indicates the number of records that were processed. For the LOG phase of REORG INDEX and REORG TABLESPACE, this value indicates the number of log records that were processed. For the SWITCH phase of REORG INDEX and REORG TABLESPACE, this value is 0.

COPY, MERGECOPY, RECOVER (RESTORE phase), and RUNSTATS:
The *object-count* field indicates the number of pages that were processed.

STOSPACE:
The *object-count* field indicates the number of table spaces or indexes that were processed.

For all other utilities, ignore the *object-count* field.

In a data sharing environment, the count is current when the command is issued from the same member on which the utility is executing. When the command is issued from a different member, the count might lag substantially. For some utilities in some build phases, the count number is not updated when the command is issued from a different member.

list-size
If the utility is processing a list of objects, the total number of objects in the list. This value might not be accurate in the UTILINIT phase, which occurs before the list size is determined.

last-started
If the utility is processing a list of objects, the item number of the last object for which processing started. This value might not be accurate in the UTILINIT phase, which occurs before the list size is determined.

job-name
The name of the job that invoked the utility. If a stored procedure invoked the utility, this value is the job name in the JCL that started the WLM-managed stored procedure address space.

time-started
The date and time when the utility started. The format is YYYY-MM-DD-HH:MM:SS.

Related information:

Syntax and options of the REORG INDEX control statement (Db2 Utilities)
Syntax and options of the REORG TABLESPACE control statement (Db2 Utilities)

DSNU106I - A terminating utility

Message DSNU106I is displayed for each instance of a utility that is in the process of terminating when the DISPLAY UTILITY command is issued. The utility is terminating in response to a TERM UTILITY command request.

If the utility has already terminated, no message is issued.

```
DSNU106I  csect-name utility-name UTILITY,
               MEMBER = member-name
               UTILID = utilid TERMINATING
```

csect-name
The name of the control section that issued the message.

utility-name
The name of the utility.

utilid
The utility ID.

member-name
The name of the Db2 member in a data-sharing environment. In a non-data-sharing environment, *member-name* is blank.

Related information:

-TERM UTILITY (Db2) (Db2 Commands)

DSNU107I - Invalid member name

Message DSNU107I is displayed if an invalid member name was specified in the MEMBER option of the DISPLAY UTILITY command. Db2 ignores the invalid member name and continues to process the next member name that was specified.

```
DSNU107I  csect-name  MEMBER NAME member-name
IS NOT A MEMBER OF THIS DATA SHARING GROUP.
```

csect-name
The name of the control section that issued the message.

member-name
The invalid member name.

DSNU108I - Invalid use of the MEMBER option

Message DSNU108I is displayed when the DISPLAY UTILITY command is issued with the MEMBER option and data sharing is not active. If data sharing is not active, MEMBER is not a valid option. Db2 ignores the MEMBER option and its parameters and continues processing.

```
DSNU108I  csect-name  DATA SHARING ENVIRONMENT
IS NOT ACTIVE, MEMBER KEYWORD NOT APPLICABLE.
```

csect-name
The name of the control section that issued the message.

DSNU111I - Subtask information

If the utility is using subtasks to process work in parallel, message DSNU111I provides an estimate of how much processing the utility subtask has completed. This message immediately follows a DSNU105I message. One DSNU111I message is displayed for each subtask.

In a data-sharing environment, this message is issued only when the DISPLAY UTILITY command is entered on the same member where the utility is executing.

```
DSNU111I  csect-name - SUBPHASE=subphase-name
COUNT=object-count
```

csect-name
The name of the control section that issued the message.

subphase-name
The activity that the subtask was performing at the time that the DISPLAY UTILITY command was issued.

object-count
The number of records that were processed by the utility subtask.

DSNU116I - RECOVER utility LOGAPPLY phase

This message applies only to the RECOVER utility. If the RECOVER utility is in the LOGAPPLY phase, message DSNU116I provides information about how much processing RECOVER has completed in this phase.

```
DSNU116I csect-name - RECOVER LOGAPPLY PHASE
DETAILS:
                      STARTING TIME = start-time
                      START RBA = start-rba
START LRSN = start-lrsn
                      END RBA = end-rba     END
LRSN = end-lrsn
                      LAST COMMITTED RBA/LRSN =
last-committed
                      ELAPSED TIME = elapsed-
time
```

csect-name
The name of the control section that issued the message.

start-time
The time that the LOGAPPLY phase started.

start-rba* and *end-rba
The relative byte address (RBA) of the first and last log records in the range of log records that are to be applied. The range accounts for all objects in the list of objects to be recovered. In a data-

sharing environment, these values are a series of zeros.

start-lrsn* and *end-lrsn
In a data-sharing environment, the log record sequence number (LRSN) of the first and last log records in the range of log records that are to be applied. The range accounts for all objects in the list of objects to be recovered.

last-committed
The RBA or LRSN of the last log record that was applied at the last commit point in the LOGAPPLY phase.

This value might not increase if multiple DISPLAY UTILITY commands are issued consecutively because the log records are sorted by object and page number.

elapsed-time
The time that has elapsed since the start of the LOGAPPLY phase. The elapsed time is expressed in the format *hh:mm:ss*.

Related information:

RECOVER (Db2 Utilities)
How recovery works in a data sharing group (Db2 Data Sharing Planning and Administration)
Optimizing the LOGAPPLY phase (Db2 Utilities)
How RBA and LRSN values are displayed (Db2 Administration Guide)

DSNU347I - Deadline information for REORG INDEX or REORG TABLESPACE

Message DSNU347I displays the most recently specified value of the DEADLINE option for the REORG INDEX or REORG TABLESPACE utility. A previous invocation of the ALTER UTILITY command might have specified a value for DEADLINE. If not, the most recently specified value is the value that was specified with the invocation of REORG INDEX or REORG TABLESPACE.

This message is displayed if all of the following conditions are true:

- The utility is REORG INDEX or REORG TABLESPACE.
- The SHRLEVEL REFERENCE or SHRLEVEL CHANGE option was specified.
- The utility is active, as indicated by the DSNU105I message.

In addition to being part of the DISPLAY UTILITY output, message DSNU347I can also be displayed when you run REORG INDEX or REORG TABLESPACE. In these cases, this message is displayed when either of these utilities estimates that the SWITCH phase will not start before the deadline that is specified in the DEADLINE option. The information in the message reflects the state at the time that this event occurred.

```
DSNU347I csect-name
         DEADLINE = yyyy-mm-dd-hh.mm.ss.mmmmmm
```

csect-name
The name of the control section that issued the message.

yyyy-mm-dd-hh.mm.ss.mmmmmm
The timestamp value of the DEADLINE option.

Related information:

Syntax and options of the REORG INDEX control statement (Db2 Utilities)
Syntax and options of the REORG TABLESPACE control statement (Db2 Utilities)
-ALTER UTILITY (Db2) (Db2 Commands)

DSNU383I - LOG phase information for REORG INDEX or REORG TABLESPACE

Message DSNU383I provides information about the LOG phase for the REORG INDEX or REORG TABLESPACE utility. It provides an estimate of how far the utility has proceeded in the indicated utility job step.

This message is displayed if all of the following conditions are true:

- The utility is REORG INDEX or REORG TABLESPACE.
- The SHRLEVEL CHANGE option was specified.
- The utility is active, as indicated by the DSNU105I message.
- The utility is in the LOG phase.

In addition to being part of the DISPLAY UTILITY output, message DSNU383I can also be displayed when you run REORG INDEX or REORG TABLESPACE. In these cases, this message is displayed when either of these utilities estimates that the SWITCH phase will not start before the deadline that is specified in the DEADLINE option. The information in the message reflects the state at the time that this event occurred.

```
DSNU383I csect-name CURRENT ITERATION NUMBER =
nnnnnn
WRITE ACCESS ALLOWED IN CURRENT ITERATION = www
ITERATION BEFORE PREVIOUS ITERATION:
   ELAPSED TIME = ha:ma:sa
   NUMBER OF LOG RECORDS PROCESSED = nnnnna
PREVIOUS ITERATION:
   ELAPSED TIME = hb:mb:sb
   NUMBER OF LOG RECORDS PROCESSED = nnnnnb
CURRENT ITERATION:
   ESTIMATED ELAPSED TIME = hc:mc:sc
   ACTUAL ELAPSED TIME SO FAR = hd:md:sd
   ACTUAL NUMBER OF LOG RECORDS BEING PROCESSED
= nnnnnd
CURRENT ESTIMATE FOR NEXT ITERATION:
   ELAPSED TIME = he:me:se
```

```
   NUMBER OF LOG RECORDS TO BE PROCESSED =
nnnnne
```

csect-name
The name of the control section that issued the message.

nnnnnn
The current iteration number.

www
An indication of whether write access is allowed in the current iteration of log processing. Possible values are YES or NO.

ha:ma:sa
The elapsed time for the iteration before the previous iteration. If the current iteration number is 1 or 2, this value is 00:00:00

nnnnna
The number of log records that were processed in the iteration before the previous iteration. If the current iteration number is 1 or 2, this value is 0.

hb:mb:sb
The elapsed time for the previous iteration. If the current iteration number is 1, this value is 00:00:00.

nnnnnb
The number of log records that were processed in the previous iteration. If the current iteration number is 1, this value is 0.

hc:mc:sc
The estimated elapsed time for the current iteration.

hd:md:sd
The elapsed time for the current iteration.

nnnnnd
The actual number of log records that are being processed for the current iteration.

he:me:se
The currently estimated elapsed time for the next iteration.

nnnnne
The currently estimated number of log records to be processed for the next iteration.

Related information:

REORG INDEX (Db2 Utilities)
REORG TABLESPACE (Db2 Utilities)

DSNU384I - MAXRO, LONGLOG, and DELAY information for REORG INDEX or REORG TABLESPACE

Message DSNU384I displays the most recently specified values of certain options for the REORG INDEX or REORG TABLESPACE utility. A previous invocation of the ALTER UTILITY command might have specified a value for each option. If not, the most recently specified value is the value that was specified with the invocation of REORG INDEX or REORG TABLESPACE.

This message is displayed if all of the following conditions are true:

- The utility is REORG INDEX or REORG TABLESPACE.
- The SHRLEVEL CHANGE option was specified.
- The utility is active, as indicated by the DSNU105I message.

In addition to being part of the DISPLAY UTILITY output, message DSNU384I can also be displayed when you run REORG INDEX or REORG TABLESPACE. In these cases, this message is displayed when either of these utilities estimates that the SWITCH phase will not start before the deadline that is specified in the DEADLINE option. The information in the message reflects the state at the time that this event occurred.

```
DSNU384I csect-name -
         MAXRO = maxro-value SECONDS
         LONGLOG = longlog-value
         DELAY = delay-value SECONDS
```

csect-name
The name of the control section that issued the message.

maxro-value
The most recently specified value of the MAXRO option. Possible values are an integer or DEFER.

longlog-value
The most recently specified value of the LONGLOG option. Possible values are CONTINUE, TERM, or DRAIN.

delay-value
The most recently specified value of the DELAY option. The value is an integer.

For more information about these option values, see the option descriptions in the REORG INDEX or REORG TABLESPACE syntax information.

Related information:

Syntax and options of the REORG INDEX control statement (Db2 Utilities)
Syntax and options of the REORG TABLESPACE control statement (Db2 Utilities)
-ALTER UTILITY (Db2) (Db2 Commands)

DSNU285I - SWITCHTIME and NEWMAXRO information for REORG INDEX or REORG TABLESPACE

Message DSNU285I displays the specified values of SWITCHTIME and NEWMAXRO for the REORG INDEX or REORG TABLESPACE utility.

This message is displayed if all of the following conditions are true:

- The utility is REORG INDEX or REORG TABLESPACE.
- The SWITCHTIME parameter is specified.
- Utility execution includes a LOG phase, and message DSNU384I is issued.
- The utility is active, as indicated by the DSNU105I message.

In addition to being part of the DISPLAY UTILITY output, message DSNU384I can also be displayed when you run REORG INDEX or REORG TABLESPACE. In that case, message DSNU285I is displayed when the utility estimates that the SWITCH phase will not start by the deadline that is specified in the DEADLINE option. The information in the message reflects the state at the time that this event occurred.

```
DSNU285I csect-name -
         SWITCHTIME = switchtime-value
         NEWMAXRO = newmaxro-value SECONDS
```

csect-name
The name of the control section that issued the message.

switchtime-value
The specified value of the SWITCHTIME option. Possible values are a timestamp in the format *yyyy-mm-dd-hh.mm.ss.mmmmmm*, or NONE.

newmaxro-value
The specified value of the NEWMAXRO option. Possible values are an integer, or NONE.

Related information:

Syntax and options of the REORG INDEX control statement (Db2 Utilities)
Syntax and options of the REORG TABLESPACE control statement (Db2 Utilities)
-TERM UTILITY (Db2) (Db2 Commands)

DSN9022I - Normal completion

When the DISPLAY UTILITY command ends normally, message DSN9022I is issued.

In a non-data-sharing environment, this message is presented in the following format:

```
DSN9022I - DSNUGCC  '-DISPLAY UTILITY' NORMAL
COMPLETION
```

In a data-sharing environment, this message is presented in the following format:

```
DSN9022I -DB1G DSNUGCC '-DIS UTIL' NORMAL
COMPLETION
```

Related information:

"DSN9022I" on page 1162

System action

In most cases, processing continues with the following exceptions:

- For each DSNU100I message, Db2 waits for directions to either restart or terminate the utility.
- For each DSNU105I message that was issued because REORG INDEX or REORG TABLESPACE estimated that the SWITCH phase will not start before the specified deadline, reorganization terminates with message DSNU374I.
- For each DSNU106I message, the utility stops and releases all resources that are associated with the utility. After the utility terminates, Db2 can reuse the utility ID.

Operator response

For each DSNU100I message, if you need to release the resources that are claimed by the stopped utility, terminate the utility by issuing the TERM UTILITY command.

User response

The appropriate user response varies depending on the messages that are issued.

- For each DSNU100I message, restart or terminate the utility job step. To restart the job step, follow the directions in Restarting an online utility (Db2 Utilities). You must have authority to run the indicated utility and to complete any other utility functions in the utility job step. To terminate the utility, issue the TERM UTILITY command. You must be the originator or have SYSOPR or SYSADM authority.
- For each DSNU105I message that was issued by REORG INDEX or REORG TABLESPACE, take the actions that are listed in "DSNU374I" on page 699.
- For each DSNU107I message, correct the member name and reissue the DISPLAY UTILITY command.
- For the DSNU108I message, make sure that data sharing is active before issuing the DISPLAY UTILITY command with the MEMBER option.
- In all other cases, no action is necessary.

If you issue a subsequent DISPLAY UTILITY command, any additional processing is reflected in the output. The output also includes any updates to the DEADLINE, MAXRO, LONGLOG, or DELAY options that were made by an ALTER UTILITY command.

Severity

For DSNU107I and DSNU108I:

4 (warning)

For all other DISPLAY UTILITY output messages:

0 (informational)

Related reference

-DISPLAY UTILITY (Db2) (Db2 Commands)
-TERM UTILITY (Db2) (Db2 Commands)
-ALTER UTILITY (Db2) (Db2 Commands)

Related information

DSNU374I
csect-name - *utility-name* WITH SHRLEVEL REFERENCE OR CHANGE HAS BEEN TERMINATED, REASON=*reason-code*

DSNU103I ***csect-name* - UNABLE TO ACCESS SYSUTIL TABLE AT THIS TIME**

Explanation

An -ALTER UTILITY, -DISPLAY UTILITY, or -TERM UTILITY command was issued at the same time that the DSNDB01.SYSUTILX table space was the object of an active utility job. The utility job might be holding locks that would cause a deadlock condition to occur.

System action

The command processing is terminated.

User response

Enter the command again. This message is issued in response to each command until the utility action on the DSNDB01.SYSUTILX table space completes.

Severity

8 (error)

DSNU104I ***csect-name* - DSNDB01.SYSUTILX IN A PENDING STATE PROHIBITS FURTHER PROCESSING**

Explanation

The -ALTER UTILITY, TERM UTILITY, or DISPLAY UTILITY command was issued when further processing for the DSNDB01.SYSUTILX table space was prohibited. This table space was either in a stopped (STOP) or in a pending state (either copy or recovery pending).

System action

Command processing is terminated.

System programmer response

Issue a -DISPLAY DATABASE command to determine the state of the DSNDB01.SYSUTILX table space.

- If the table space is stopped for maintenance reasons, complete the activity and use the START DATABASE SPACENAM command to start the table space.
- If the state is copy pending, do a full image copy.
- If the state is recovery pending, use the RECOVER utility to recover DSNDB01.SYSUTILX.

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

User response

Notify the Db2 system programmer.

Severity

0 (informational)

DSNU105I ***csect-name* - USERID=*userid* MEMBER=*member-name* UTILID=*utilid* PROCESSING UTILITY STATEMENT *statement-number* UTILITY=*utility-name* PHASE=*utility-phase* COUNT=*object-count* NUMBER OF OBJECTS IN LIST=*list-size* LAST OBJECT STARTED=*last-started* STATUS=ACTIVE JOBNAME = *job-name* TIME STARTED = *time-started***

Explanation

This message is displayed in one of the following circumstances:

- As part of the output from the DISPLAY UTILITY command
- When the REORG INDEX or REORG TABLESPACE utility estimates that the SWITCH phase will not start by the deadline that is specified in the DEADLINE option

In either case, this message is described as part of the DISPLAY UTILITY output in "DSNU100I" on page 633.

DSNU106I ***csect-name utility-name* UTILITY, MEMBER = *member-name* UTILID = *utilid* TERMINATING**

Explanation

This message is a section of output from the DISPLAY UTILITY command, which described in message "DSNU100I" on page 633.

DSNU107I ***csect-name*** **MEMBER NAME** ***member-name*** **IS NOT A MEMBER OF THIS DATA SHARING GROUP.**

Explanation

This message is a section of output from the DISPLAY UTILITY command, which described in message "DSNU100I" on page 633.

Severity

4 (warning)

DSNU108I ***csect-name*** **DATA SHARING ENVIRONMENT IS NOT ACTIVE, MEMBER KEYWORD NOT APPLICABLE.**

Explanation

This message is a section of output from the DISPLAY UTILITY command, which described in message "DSNU100I" on page 633.

Severity

4 (warning)

DSNU109I ***csect-name*** **UTILITY** ***utilid*** **CAN ONLY BE TERMINATED OR ALTERED BY MEMBER =** ***member-name***

Explanation

The -TERM UTILITY or -ALTER UTILITY command cannot terminate or alter the utility job with identifier *utilid*, because it belongs to member *member-name* of the Db2 data sharing group. Activeutility jobs can be terminated or altered only from the system on which they were running.

System action

If this message was issued for the -TERM UTILITY command, the command ignores the *utilid* and continues to process the next utilid, if any. If this message was issued for the -ALTER UTILITY command, the command is rejected, and further processing of the command is ended.

User response

Make sure the *utilid* identifies the utility you want to terminate or alter. If it does, issue the command from the Db2 member identified in the message.

Severity

8 (error)

DSNU110I ***csect-name*** **UTILID =** ***utilid*** **INVALID**

Explanation

An invalid utility ID was specified for one of the following commands:

- ALTER UTILITY
- DISPLAY UTILITY
- TERM UTILITY

csect-name
The name of the control section that issued the message.

utilid
The invalid utility ID.

A utility ID is a 1 - 16 byte alphanumeric token that can contain any number of periods.

System action

The command is rejected and command processing ends.

User response

Review the utility ID that is provided in the message to determine why it does not conform to the syntax rules of a utility ID. Correct the utility ID and reissue the request.

Severity

8 (error)

Related reference
-ALTER UTILITY (Db2) (Db2 Commands)
-DISPLAY UTILITY (Db2) (Db2 Commands)
-TERM UTILITY (Db2) (Db2 Commands)

DSNU111I ***csect-name*** **- SUBPHASE=*subphase-name* COUNT=*n***

Explanation

This message is a section of output from the DISPLAY UTILITY command, which described in message "DSNU100I" on page 633.

DSNU112I ***csect-name*** **- NO AUTHORIZED UTILITY FOUND FOR UTILID =** ***utilid***

Explanation

An ALTER UTILITY, DISPLAY UTILITY, or TERM UTILITY command was issued. However, Db2 cannot find the utility job that is identified by the specified utility ID. The utility ID might not be correct, or the utility might be terminated already.

csect-name
The name of the control section that issued the message.

utilid
The utility ID.

System action

The command request is rejected.

User response

Verify that the utility ID was entered correctly. To view all currently valid identifiers, issue DISPLAY UTILITY (*) or DISPLAY UTILITY (*partial-utility-id**).

Severity

0 (informational)

Related reference
-ALTER UTILITY (Db2) (Db2 Commands)
-DISPLAY UTILITY (Db2) (Db2 Commands)
-TERM UTILITY (Db2) (Db2 Commands)

DSNU113I ***csect-name*** **DISPLAY OR TERM UTILITY MESSAGE LIMIT HAS BEEN REACHED**

Explanation

This message indicates that the DISPLAY or TERM utility command that was specified generated more messages than will fit in the amount of storage that is available.

System action

The DISPLAY or TERM UTILITY command terminates.

User response

Specify a set of utility jobs using a*partial-utility-id** value to limit the number of utilities being displayed or terminated.

Severity

0

Related reference
-DISPLAY UTILITY (Db2) (Db2 Commands)
-TERM UTILITY (Db2) (Db2 Commands)

DSNU114I ***csect-name*** **UTILITY COMMANDS SUBSYSTEM FAILURE, REASON=X*code***

Explanation

This message indicates an abend has occurred in the utility commands subsystem.

System action

The command abends. In the case of the -TERM command, termination actions taken previously under this command are backed out.

User response

Prior messages and/or the SVC dump identify the failure. If the condition can be corrected, the command may be reissued.

Problem determination

In most cases, the failure is not user related. In some cases, prior messages indicate a user error that may be corrected. The problem may be as simple as SYSIBM.SYSUTIL being temporarily locked by another command or a utility job. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

DSNU115I ***csect-name utility-name*** **UTILITY WITH UTILID =** ***utilid*** **CAN ONLY BE TERMINATED BY A MEMBER WITH THE SAME RELEASE =** ***release***

Explanation

Command TERM UTILITY cannot terminate the utility job with identifier *utilid* because it belongs to a member with a release level identified in the message. Some utilities can be terminated only from a member of the Db2 data sharing group with the same release level.

System action

Command TERM UTILITY is rejected for the indicated utility job.

User response

Make sure the *utilid* identifies the utility you want to terminate. If it does, issue command TERM UTILITY from a member with a release level identified in the message in the Db2 data sharing group.

Severity

0 (informational)

DSNU116I ***csect-name*** **- RECOVER LOGAPPLY PHASE DETAILS:**

Explanation

This message is a section of output from the DISPLAY UTILITY command, which is described in message "DSNU100I" on page 633.

DSNU118I ***csect-name*** **MAXIMUM NUMBER OF ERROR MESSAGES ISSUED**

Explanation

The utility issued the maximum number of messages that can be generated with the available memory for message buffers. Db2 suppresses any additional error messages.

System action

Utility processing continues.

User response

Refer to the message information for any other error messages that are issued by the utility and take the specified action to resolve the problems. Then rerun the utility to ensure that all errors are resolved.

Severity

0 (informational)

DSNU120I ***csect-name*** **DEADLOCK INFORMATION: INTERVAL COUNT = *interval-count*, NUMBER OF WAITERS = *waiter-count*.**

Explanation

Utility processing encountered a resource that is currently unavailable because the resource is involved in a deadlock condition.

csect-name
The name of the control section that issued the message.

interval-count
Unique ID for this deadlock interval.

waiter-count
The number of waiters involved in the timeout.

The introductory message text is followed by set of column headings and one or more rows with information about the resource holders:

LOCK NAME ***lock-name***
The lock resource name.

TYPE ***lock-type***
The type of lock, such as PG or DBD.

FUNC/STATE/DURATION ***lock-information***
Information about the lock function, state, or duration. Expected values depend on the type of information.

Lock function
The requested lock function: LOCK, UNLOCK, or CHANGE.

Lock state
The lock resource state, such as SHARED or EXCLUSIVE.

Lock duration
The lock resource duration, such as MANUAL or PLAN.

HOLDER/WAITER ***hw-type***
Indicator if the resource is a holder or a waiter.

PLAN-ID ***plan-id***
The plan name of the holder or waiter.

CORR-ID ***correlation-id***
The correlation ID of the holder or waiter.

MEMBER NM ***member-name***
The Db2 member name.

System action

The utility abnormally terminates with a X'04E' abend and a utility reason code. The dump is suppressed. Message DSNT500I is issued.

System programmer response

Use the information provided in messages DSNU121I (specifically information about holders and waiters) and DSNT500I to identify the lock resources and the utility jobs and applications that are involved in the deadlock.

User response

Use the TERM UTIL command to restart or terminate the utility.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- IRLM trace output.
- SYSPRINT output, including JCL, for the application program or batch job, and system messages that were issued. Make sure that MSGLEVEL=(1,1) on the JOB statement so that all diagnostic information is sent to SYSPRINT.
- Listing of the IRLM procedure.
- Results from SELECT * from SYSIBM.SYSDATABASE.

Related reference

Db2 abend completion codes (X'04E' and X'04F) (Db2 Codes)

-TERM UTILITY (Db2) (Db2 Commands)

Related information

DSNT500I

csect-name RESOURCE UNAVAILABLE REASON *reason-code* TYPE *resource-type* NAME *resource-name*

Resource types

Type codes are associated with particular types of resources.

DSNU121I ***csect-name* TIMEOUT INFORMATION: NUMBER OF HOLDERS/WAITERS = *hw-count*, TIMEOUT FACTOR = *timeout-factor*.**

Explanation

Utility processing encountered a resource that is currently unavailable because of a timeout condition. The resource cannot be granted and the wait period has exceeded the maximum wait period specified by the RESOURCE TIMEOUT field on panel DSNTIPI (the IRLMRWT subsystem parameter).

csect-name
The name of the control section that issued the message.

hw-count
The number of holders or waiters involved in the timeout.

timeout-factor
An internally defined wait period.

The introductory message text is followed by set of column headings and one or more rows with information about the resource holders:

LOCK NAME *text*
The lock resource name.

TYPE *text*
The type of lock, such as PG or DBD.

FUNC/STATE/DURATION *text*
Information about the lock function, state, or duration. Expected values depend on the type of information.

Lock function
The requested lock function: LOCK, UNLOCK, or CHANGE.

Lock state
The lock resource state, such as SHARED or EXCLUSIVE.

Lock duration
The lock resource duration, such as MANUAL or PLAN.

HOLDER/WAITER *text*
Indicator if the resource is a holder or a waiter.

PLAN-ID *text*
The plan name of the holder or waiter.

CORR-ID *hex*
The correlation ID of the holder or waiter.

MEMBER NM *text*
The Db2 member name.

System action

The utility abnormally terminates with a X'04E' abend and a utility reason code. The dump is suppressed. Message DSNT500I is issued.

System programmer response

Use the information provided in messages DSNU121I (specifically information about holders and waiters) and DSNT500I to identify the lock resources and the utility jobs and applications that are involved in the timeout.

User response

Use the TERM UTIL command to restart or terminate the utility.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.

- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- IRLM trace output.
- SYSPRINT output, including JCL, for the application program or batch job, and system messages that were issued. Make sure that MSGLEVEL=(1,1) on the JOB statement so that all diagnostic information is sent to SYSPRINT.
- Listing of the IRLM procedure.
- Results from SELECT * from SYSIBM.SYSDATABASE.

Related reference

RESOURCE TIMEOUT field (IRLMRWT subsystem parameter) (Db2 Installation and Migration)

Db2 abend completion codes (X'04E' and X'04F) (Db2 Codes)

-TERM UTILITY (Db2) (Db2 Commands)

Related information

DSNT500I

csect-name RESOURCE UNAVAILABLE REASON *reason-code* TYPE *resource-type* NAME *resource-name*

Resource types

Type codes are associated with particular types of resources.

DSNU122I ***csect-name* USER *userid* NOT AUTHORIZED FOR *util-name* UTILITY ON THE OBJECT *object-type obj-qual.obj-name* IN THE IMPLICIT DATABASE *db-name***

Explanation

User *userid* attempted to execute a utility *util-name* against an object in the implicit database *db-name*. The user either does not have ownership of the object in the implicit database, has no DSNDB04 authorization or was not given authorization to execute utilities on object *obj-name*.

System action

Utility processing is not initiated.

System programmer response

Determine why the user was denied access. Either the authorization should be corrected, or another authorized user should invoke the utility.

User response

Ensure that the correct database was specified. If this operation involves a table with multilevel security with row granularity, then this user needs to have a valid security label to execute this utility. If this error occurred processing a LISTDEF list, alter the list to exclude the objects that lack proper authorization. If the list cannot be modified, OPTIONS EVENT(ITEMERROR, SKIP) may be used to continue processing when this error occurs.

Problem determination

The following catalog tables can be examined to determine who has the proper authority: SYSIBM.SYSUSERAUTH, SYSIBM.SYSDBAUTH, SYSIBM.SYSRESAUTH, SYSIBM.SYSINDEXES (ownership), or SYSIBM. SYSTABLESPACE (ownership).

Severity

12 (severe error)

DSNU123I ***csect-name* - ATTEMPT TO USE NEW FUNCTION BEFORE NEW FUNCTION MODE**

Explanation

A Db2 utility attempted to use a new function that is not supported before new-function mode is enabled in Db2 11.

csect-name
The name of the control section that issued the message.

System action

The utility job is terminated.

User response

Identify the new function that the utility is using. Either delay use of the function until new-function mode has been enabled, or modify the utility to use functions that are allowed before new-function mode is enabled.

Severity

8 (error)

Related tasks

Migrating your Db2 subsystem to new-function mode (Db2 Installation and Migration)

DSNU124I ***csect-name* - *ignored-keywords* SPECIFICATION IS IGNORED AND *alternate-keywords* IS IN EFFECT**

FOR CURRENT UTILITY EXECUTION

Explanation

A utility control statement specified keywords that are obsolete or not supported in combination with other keywords that were specified or the objects involved for the current utility execution. The utility runs with the behavior of the indicated alternate keywords instead.

csect-name
The name of the control section that issued the message.

ignored-keywords
Keywords that the utility cannot use for the current utility execution.

alternate-keywords
Keywords that the utility applied for those that cannot be used for the current utility execution.

System action

Processing continues.

User response

No action is required.

Severity

0 (informational)

DSNU125I ***csect-name function*** **WILL NO LONGER BE AVAILABLE IN A FUTURE RELEASE OF DB2**

Explanation

The specified function is deprecated and will be removed from a future release of Db2.

csect-name
The name of the control section that issued the message.

function
The deprecated function that was specified.

System action

Processing continues.

User response

No immediate action is required. However, prepare for the utility change in a future release of Db2.

Severity

0 (informational)

DSNU126I ***csect-name function*** **IS NO LONGER SUPPORTED.**

Explanation

The specified function is no longer supported in the current Db2 release and environment.

csect-name
The name of the control section that issued the message.

function
The deprecated function that was specified.

System action

Processing terminates.

User response

Identify the deprecated function, and submit the corrected utility job.

Severity

8 (error)

DSNU160I ***csect-name - utility-name*** **UTILITY, UTILID =** ***utilid*** **REQUESTED TO TERMINATE, PHASE =** ***utility-phase*** **WAS ACTIVE**

Explanation

This message is issued in response to a -TERM UTILITY command. It acknowledges that the request for termination was received and verified. At the time the -TERM UTILITY request was received, utility 'utility-name' was ACTIVE in the utility job step identified by UTILID 'utilid'.

System action

Db2 has accepted the request to terminate the indicated utility job step. The utility terminates at its next cleanup point.

User response

This message is an acknowledgement that the request has been accepted and is in progress.

DSNU161I ***csect-name - utility-name*** **UTILITY WITH UTILID =** ***util-id*** **CAN NOT BE TERMINATED AT THE DB2 TRACKER SITE**

Explanation

Db2 does not permit the termination of certain utilities at a tracker site because terminating these utilities may leave the target objects in an unpredictable state. The next recovery cycle should cause the utilities to resolve. You may not terminate the following utilities at a tracker site:

- COPY
- LOAD
- REORG
- REPAIR

System action

The utility does not terminate.

System programmer response

Monitor the status of these utilities after the next tracker site recovery cycle.

User response

Contact the system programmer.

Severity

8 (error)

DSNU162I ***csect-name*** **-** ***utility-name*** **UTILITY WITH UTILID =** ***util-id*** **IS TERMINATING WITH OBJECTS THAT HAVE BEEN STARTED WITH ACCESS(FORCE) AND THEN DROPPED**

Explanation

Database objects that are used by the terminating utility were started with the command START DATABASE ACCESS(FORCE) and then dropped.

System action

Termination process continues.

User response

If the terminating utility is online REORG, TERM UTILITY does not rename and delete residual Db2-managed or user-defined data sets. You must delete those data sets manually.

Severity

4 (warning)

DSNU164I ***csect-name cccccccc*** **UTILITY, UTILID =** ***uuuu*** **ALREADY TERMINATING**

Explanation

This message is in response to a -TERM UTILITY command. It indicates that the utility job step indicated by UTILID 'uuuuu' has already been requested to terminate and is in the process of doing so now.

System action

Db2 is currently in the process of terminating the indicated utility job step. Upon completion, all resources will have been released to their prior state, and all tracking of the indicated UTILID will have been removed. At that point, the UTILID is available for reuse.

User response

This message indicates that either the request was redundant, or someone else is also interested in the termination of the subject utility job step.

Severity

0 (informational)

DSNU166I ***csect-name utility-name*** **UTILITY, UTILID =** ***uid*** **NOT EXECUTING, CLEANUP COMPLETE**

Explanation

This message is in response to a -TERM UTILITY command. The 'utility-name' utility identified by UTILID 'uid' was found to be stopped at the time of the request to terminate.

System action

Cleanup is performed for the indicated stopped utility. All resources held by the utility are freed and all storage of the utility job is deleted. The utility job is no longer restartable.

System programmer response

Resources held by this utility may have prevented applications, commands, and other utilities from executing. These have been freed, so that the inhibited tasks may now be performed.

Severity

0 (informational)

DSNU169I **THE OBJECT CONVERSION REQUESTED BY *requestor-type requestor-name requestor-operand* IS IGNORED**

Explanation

Page set conversion between BASIC format and EXTENDED format was requested by the subsystem parameter setting or the utility keywords that are indicated in the message. The page set conversion is not allowed at this time and was ignored. The message occurs in the following situations:

- An object cannot be converted to EXTENDED mode while the subsystem is in conversion mode. This message is accompanied by message DSNU123I.
- An object cannot be converted back to BASIC mode after the 6-byte logging limit is reached.

requestor-type
The type of request, either ZPARM (for a subsystem parameter) or KEYWORD (for a utility keyword).

If the type is ZPARM, the subsystem exceeded the logging threshold for 6-byte RBA and LRSN values, and the BASIC format is no longer valid on the subsystem. The subsystem must be converted to EXTENDED format. Objects cannot be opened for update until conversion is complete.

requestor-name
The name of the requestor.

requestor-operand
The operand that is ignored: NONE, BASIC, or EXTENDED.

System action

The request is ignored. Message DSNU123I is issued.

User response

Specify RBALRSN_CONVERSION NONE or contact your system administrator to change the OBJECT_UTILITY_CONVERSION subsystem parameter to NONE. Do not use RBALRSN_CONVERSION BASIC or EXTENDED while the system is in conversion mode. Do not use RBALRSN_CONVERSION BASIC after the 6-byte logging limit is reached.

System administrator response

While the system is in conversion mode, configure your subsystem parameters with OBJECT_UTILITY_CONVERSION set to NONE.

Severity

4 (warning)

Related reference

REORG TABLESPACE (Db2 Utilities)
REORG INDEX (Db2 Utilities)
UTILITY OBJECT CONVERSION field (UTILITY_OBJECT_CONVERSION subsystem parameter) (Db2 Installation and Migration)
OBJECT CREATE FORMAT field (OBJECT_CREATE_FORMAT subsystem parameter) (Db2 Installation and Migration)

Related information

DSNU123I
csect-name - ATTEMPT TO USE NEW FUNCTION BEFORE NEW FUNCTION MODE

DSNU170I ***csect-name* UTILITY JOB TERMINATED BY TERM COMMAND**

Explanation

A -TERM UTILITY command was issued for this utility job step.

System action

The executing utility terminates processing and frees all held resources. All storage of the utility job has been deleted. Therefore, the job is not restartable. Subsequent utilities in the same job step are not executed.

User response

All or portions of the utility job step can be resubmitted as needed.

Severity

8 (error)

DSNU172I ***csect-name* UTILITY JOB STOPPED BY STOP DB2 COMMAND**

Explanation

A -STOP DB2 command was issued during execution of the utility job step.

System action

The executing utility stops processing but continues to hold resources. Subsequent utilities in the same job step are not executed. The storage of the utility job is retained. Therefore, the utility job step is restartable.

User response

Following a -START DB2 command, the utility job step may be restarted. Alternatively, the utility may be terminated using the -TERM UTILITY command and resubmitted as a new job. A REORG utility that has passed the UNLOAD phase should rarely be terminated.

Severity

8 (error)

DSNU180I ***csect-name*** **UTILITY IS NOT COMPATIBLE WITH THE** ***utility-name*** **UTILITY UTILID =** ***utility-id*** **OBJECT =** ***space-name.object-name***

Explanation

Certain utilities cannot process the same table space or index space at the same time.

csect-name
The name of the control section that issued the message.

utility-name
The name of the utility.

utility-id
The ID of the utility (UTILID).

space-name
The name of the table space or index space.

object-name
The name of the object.

These objects, or their related log entries, might be target objects of the utilities or a mapping table, or they might be catalog or directory table spaces that are updated by the utilities. For example, DSNDB06.SYSCOPY is updated by LOAD.

System action

The starting utility is not initiated, and further utility processing in that utility job step is terminated.

User response

Use the DISPLAY UTILITY command with the *utility-id* that is provided in the message to determine when the utility that caused your utility to be rejected is completed.

To avoid this error when running concurrent REBUILD INDEX with SHRLEVEL CHANGE, specify multiple indexes on a single utility execution instead of invoking multiple utilities.

Severity

8 (error)

Related concepts

Concurrency and compatibility of utilities (Db2 Performance)

Db2 online utilities (Db2 Utilities)

Related reference

-DISPLAY UTILITY (Db2) (Db2 Commands)

DSNU181I ***csect-name*** **RESTART NOT ALLOWED FOR** ***utility-name*** **UTILITY**

Explanation

An attempt was made to restart the named utility. Db2 does not allow this utility to be restarted.

System action

Utility processing is abended. Abend reason code 00E40018 might be issued.

System programmer response

If necessary, take actions to prevent access to the table space before terminating the utility.

User response

Issue the -TERM UTIL command to terminate the utility job and then rerun the job without the RESTART parameter.

DSNU182I ***csect-name utility-name*** **MUST BE THE ONLY UTILITY IN SYSIN**

Explanation

Utilities must process certain objects alone or in a small logically related group in a single utility control statement. Also, some utility control statements must be the only control statement in the job step. This message indicates that one of these restrictions was violated.

The following list gives examples of these restrictions:

- A CATMAINT utility control statement with the UPDATE UTILX option must be the only control statement in the job step.
- A BACKUP SYSTEM utility control statement must be the only control statement in the job step.
- The CHECK DATA utility must process DSNDB01.SYSUTILX alone. No other objects can be specified in the same CHECK DATA control statement, and no other control statements can be in the job step.

- The CHECK INDEX utility must process DSNDB01.SYSUTILX indexes alone. No other objects can be specified in the same CHECK INDEX control statement, and no other control statements can be in the job step.
- The COPY utility must process DSNDB01.SYSUTILX and its indexes alone. No other objects can be specified in the same COPY control statement, and no other control statements can be in the job step.
- The QUIESCE utility must process DSNDB01.SYSUTILX alone. No other objects can be specified in the same COPY control statement, and no other control statements can be in the job step.
- The RECOVER utility must process DSNDB01.SYSUTILX and its indexes alone. No other objects can be specified in the same RECOVER control statement, and no other control statements can be in the job step.
- The RECOVER utility must process DSNDB01.DBD01 and its indexes alone. No other objects can be specified in the same RECOVER control statement, and no other control statements can be in the job step.
- A REORG INDEX utility control statement for DSNDB01.SYSUTILX indexes must be the only control statement in the job step.
- During enabling-new-function mode, a REORG TABLESPACE utility control statement for DSNDB01.DBD01 or DSNDB01.SPT01 must be the only control statement in the job step.
- The REPAIR utility must process DSNDB01.SYSUTILX and its indexes alone. No other objects can be specified in the same REPAIR control statement, and no other control statements can be in the job step.
- A RESTORE SYSTEM utility control statement must be the only control statement in the job step.

In most cases, these utilities tolerate the presence of DIAGNOSE, LISTDEF, OPTIONS, and TEMPLATE control statements, if those statements are required for processing.

csect-name
The name of the control section that issued the message.

utility-name
The name of the Db2 utility.

System action

If any work was performed by utilities in the same utility job step before the identified utility, that work persists. However, the utility that is identified in this message and any subsequent utilities are not executed, and the utility job step is placed in the stopped state.

User response

See the information about the failing utility for specific restrictions, which vary by utility.

Then, make the failing job step and control statement small enough to avoid the error. Remove other control statements and other objects from the failing statement until the error goes away. Remove the control statements that follow the failing statement and run them in a separate job step. If the error still occurs, remove the control statements that precede the failing statement, except those statements that are required to run the statement, such as TEMPLATE statements. If the error still occurs and the control statement lists multiple objects, put each object in separate control statements. Some grouping of objects might be possible in some cases, such as DSNDB01.SYSUTILX with its indexes.

Severity

8 (error)

Related concepts

Db2 online utilities (Db2 Utilities)

DSNU183I ***csect-name - utility-name*** **UTILITY NOT COMPATIBLE WITH OTHER ACTIVE UTILITIES**

Explanation

The utility identified by 'utility-name' is executing against table space DSNDB01.SYSUTILX. This table space is integral to controlling the execution of utilities. Control over other utilities running at the same time would be lost if the utility were allowed to execute. Therefore, the identified utility must be executed alone. There must be no other active Db2 utilities in the system.

System action

Utility execution is terminated.

User response

Rerun the utility when there are no other utilities executing. Use the -DISPLAY UTILITY command to see what utilities are ACTIVE. Utilities in the STOPPED state are allowed.

Severity

8 (error)

DSNU184I ***csect-name*** **- DO NOT RECOVER OBJECT qual.obj-nm UNTIL THE NEXT TRACKER SITE RECOVERY CYCLE**

Explanation

If Db2 detects an inconsistency relating to a utility's status on object 'qual.obj-nm' at the tracker site, Db2 issues this message. This event can occur if the SYSUTIL record for the utility either does not exist, or reflects incorrect information about hte status of the utility.

System action

The utility issues ABEND04E with return code 00E40009.

System programmer response

Wait for the next recovery cycle to recover the object named in this message. If the object named in this message is a catalog or directory object, you cannot recover this object, or any other objects in the list of catalog and directory objects, or any user data or indexes. Wait until the next recovery cycle to recover the object.

User response

Contact the system programmer.

Severity

8 (error)

DSNU185I ***csect-name*** **THE VSAM DATA SET DOES NOT EXIST FOR*object-type object-qualifier.object-name part part-number***

Explanation

The VSAM data set or data sets for the specified object are not defined yet because the object was created with the DEFINE NO attribute or is a table space that contains an accelerator-only table.

csect-name
The name of the control section that issued the message.

object-type
The type of object.

object-qualifier.object-name
The name of the object, as a qualified name.

part part-number
The value that identifies the partition.

System action

The utility skips the object that was created with DEFINE NO, and processing continues.

Severity

0 (informational)

Related concepts
Effect of utilities on objects that have the DEFINE NO attribute (Db2 Utilities)

DSNU186I ***csect-name*****- A *index-type* INDEX CANNOT BE PROCESSED BY THIS UTILITY**

Explanation

The target objects specified for the utility include one or more *index-type* indexes, which are not supported by this utility. If the utility specifies a table space, you can drop the spatial indexes, run the utility, and then create the indexes again.

index-type
Indicates the type of index that is not supported by this utility.

System action

The utility does not execute.

Severity

8

DSNU188I ***csect-name*** **OPTION PRESORTED YES IS NOT VALID WHEN USED WITH LOAD *reason-text*. OPTION IS IGNORED.**

Explanation

The LOAD utility ran with the option PRESORTED YES in a situation where the option is not supported.

csect-name
The name of the control section that issued the message.

reason-text
The reason why the option is not valid. Possible values are:

- PARTITION PARALLELISM ACTIVE
- WITHOUT PARALLEL INDEX BUILD ACTIVE
- SHRLEVEL CHANGE
- SORTKEYS NO
- ON A TABLE WITH NO INDEXES

System action

Utility processing continues, but the PRESORTED YES option is ignored.

A BUILD subtask is not initiated by the RELOAD phase. Keys are sorted and indexes are built after RELOAD processing completes.

User response

No action is required.

Severity

4 (warning)

Related reference

LOAD (Db2 Utilities)

DSNU189I ***csect-name*** **OPTION PRESORTED YES WAS SPECIFIED, BUT THE LOAD UTILITY INPUT DATA SET KEYS WERE FOUND TO BE OUT OF SEQUENCE IN THE INPUT DATA. STATISTICS WILL NOT BE COLLECTED OR INVALIDATED FOR INDEX** ***creator-name.index-name***

Explanation

The LOAD utility ran with the PRESORTED YES option, but the input data had keys out of sequence.

csect-name
The name of the control section that issued the message.

creator-name.index-name
The name of the index, identified by the name of its creator.

System action

Utility processing continues.

Inline statistics are not collected. If either the REPLACE or PART REPLACE option was used and keys are found out of order, real-time statistics are invalidated for the index.

User response

Run the RUNSTATS utility on the object.

Severity

4 (warning)

Related reference

LOAD (Db2 Utilities)
RUNSTATS (Db2 Utilities)

DSNU190I ***csect-name*** **UNABLE TO RESTART LOAD RESUME WITH THE PRESORTED YES OPTION SPECIFIED**

Explanation

An attempt was made to restart the LOAD utility during the RELOAD phase with both the RESUME and PRESORTED YES options. During the RELOAD phase, the RESUME option cannot be used with the PRESORTED YES option. Use LOAD REPLACE PRESORTED YES instead.

csect-name
The name of the control section that issued the message.

System action

Utility processing is abended. Either reason code 00E40018 or 00E40310 might be issued.

User response

Recover the table space and all indexes within the table space that were left in a rebuild pending state when the LOAD utility failed

Related concepts

Restart of LOAD (Db2 Utilities)

Related reference

LOAD (Db2 Utilities)

Related information

00E40018 (Db2 Codes)
00E40310 (Db2 Codes)

DSNU191I ***csect-name*** **LOB AND/OR XML COLUMN DATA WILL BE OMITTED WHEN USING THE FORMAT INTERNAL OPTION FOR TABLE** ***creator-name.table-name***

Explanation

Either the LOAD or UNLOAD utility ran with FORMAT INTERNAL option on a table that contains LOB columns, XML columns, or both. LOB and XML data are not supported by the FORMAT INTERNAL option.

csect-name
The name of the control section that issued the message.

creator-name.table-name
The name of the table, identified by the name of its creator.

Use the FORMAT INTERNAL option only if any LOB or XML data is not of interest.

System action

Processing continues.

The LOAD utility omits the LOB and XML table spaces and leaves the base table space in the auxiliary check pending (ACHKP) status.

The UNLOAD utility unloads the base row data in the internal format. LOB and XML data is not unloaded.

User response

Correct the auxiliary check-pending status on the table that was loaded.

Severity

4 (warning)

Related reference

LOAD (Db2 Utilities)
UNLOAD (Db2 Utilities)
Auxiliary CHECK-pending status (Db2 Utilities)

DSNU192I ***csect-name*** **OPTION** ***option-name*** **IS NOT VALID WHEN USED WITH MORE THAN ONE TABLE FOR THE** ***utility-name*** **UTILITY**

Explanation

An attempt was made to use the LOAD or UNLOAD utility for multiple tables with an option that can be used against only one table.

csect-name
The name of the control section that issued the message.

option-name
The name of the option.

LOAD utility
FORMAT INTERNAL or PRESORTED YES

UNLOAD utility
FORMAT INTERNAL

utility-name
The name of the utility.

System action

Utility processing terminates.

User response

Specify the option that is indicated by *option-name* for only one table.

Severity

8 (error)

Related reference

LOAD (Db2 Utilities)
UNLOAD (Db2 Utilities)

DSNU200I ***csect-name*** **- ERROR RANGE ON TABLE SPACE** ***database.tablespace-name*** **PROHIBITS PROCESSING**

Explanation

The utility encountered an error range on the identified table space or partition, which prohibits it from continuing.

System action

The utility fails serialization and terminates.

User response

Correct the error range for the table space by running RECOVER ERROR RANGE. Then resubmit the original failing utility.

Severity

8 (error)

DSNU201I ***csect-name*** **- ERROR RANGE ON INDEX** ***creator.index-name*** **PROHIBITS PROCESSING**

Explanation

The utility encountered an error range on the identified index space or partition which prohibits it from continuing.

System action

The utility fails serialization and terminates.

User response

Identify the incorrect error range by issuing the DISPLAY command for the index. Run the RECOVER or REBUILD INDEX utility to restore the index or index partition that has the error range. Then resubmit the original failing utility.

Severity

8 (error)

DSNU202I ***csect-name*** **- RECOVER PENDING ON TABLE SPACE** ***database.tablespace-name*** **PROHIBITS PROCESSING**

Explanation

An attempt was made to execute a utility against a table space that is in a recover pending state.

System action

Utility processing is not initiated.

System programmer response

Determine which of the three utilities, LOAD REPLACE, RECOVER, or REPAIR, should be used to remove the object from the recover pending state.

User response

Remove the table space from the recover pending state by using either LOAD REPLACE, RECOVER, or REPAIR against the object. LOAD REPLACE with KEEPDICTIONARY is not allowed on a table space (with compression active) in the recover pending state. Resubmit the job.

Severity

8 (error)

DSNU203I ***csect-name*** **- RECOVER PENDING ON INDEX** ***creator.index-name*** **PROHIBITS PROCESSING**

Explanation

An attempt was made to execute a utility against an index that is in a rebuild pending state.

System action

Utility processing is not initiated.

User response

Remove the index from the rebuild pending state by using the REBUILD INDEX utility against the index. . Resubmit the job.

Severity

8 (error)

DSNU204I ***csect-name*** **- PAGESET REBUILD PENDING ON** ***obj-type obj-qual.obj-name*** **PROHIBITS PROCESSING**

Explanation

An attempt was made to execute a utility against a logical partition of an index when the index is in PAGESET rebuild pending state,

System action

Utility processing terminates.

User response

Remove the index space from PAGESET rebuild pending state by running the REBUILD INDEX utility against the entire index, not just a single logical partition. Resubmit the job.

Severity

8 (error)

DSNU205I ***csect-name*** **- LOGICAL ERROR RANGE (LOGICAL PAGE LIST) ON TABLE SPACE** ***database.tablespace-name*** **PROHIBITS PROCESSING**

Explanation

The utility cannot continue because it encountered a logical error range (logical page list) on the identified table space or partition.

System action

The utility terminates.

User response

Use the -START DATABASE command to correct the logical error range (LPL) for the table space. Then resubmit the original failing utility.

Severity

8 (error)

DSNU206I ***csect-name*** **- LOGICAL ERROR RANGE (LOGICAL PAGE LIST) ON INDEX** ***creator.index-name*** **PROHIBITS PROCESSING**

Explanation

The utility cannot continue because it encountered a logical error range (logical page list) on the identified index space or partition.

System action

The utility terminates.

User response

Issue the -DISPLAY command for the index to identify the logical error range (LPL). There are two ways to

restore the index or index partition that has the LPL before resubmitting the original failed utility.

- Issue the START DATABASE command to clear the LPL status, then run the RECOVER or REBUILD INDEX utility.
- Run the RECOVER or REBUILD INDEX utility to restore the entire nonpartitioning index (NPI).

Severity

8 (error)

DSNU207I ***csect-name*** **- GROUP BUFFER POOL RECOVERY PENDING ON TABLE SPACE** ***database.tablespace-name*** **PROHIBITS PROCESSING**

Explanation

You cannot execute a utility on a table space that is in a group buffer pool recovery pending status.

System action

Utility processing does not start.

User response

Use the -START DATABASE command to remove the table space from the group buffer pool recovery pending status. Then resubmit the job.

Severity

8 (error)

DSNU208I ***csect-name*** **- GROUP BUFFER POOL RECOVERY PENDING ON INDEX** ***creator.index-name*** **PROHIBITS PROCESSING**

Explanation

You cannot execute a utility on an index that is in a group buffer pool recovery pending (GRECP) status.

System action

Utility processing does not start.

User response

Run the REBUILD INDEX utility on the index to remove the table space from the group buffer pool recovery pending status. Then resubmit the job.

Severity

8 (error)

DSNU209I ***csect-name*** **- RESTART PENDING ON** ***obj-type database.tablespace-name*** **PROHIBITS PROCESSING**

Explanation

An attempt was made to execute a utility against a table space or index space that is in a restart pending state.

System action

Utility processing is not initiated.

System programmer response

Use the DISPLAY THREAD TYPE(POSTPONED) to determine the status of the resource. Use the RECOVER POSTPONED command if recover has not already been started. Resubmit the job.

Severity

8 (error)

DSNU210I ***csect-name*** **- INFORMATIONAL COPY PENDING ON** ***obj-type obj-qual.obj-name*** **PROHIBITS PROCESSING**

Explanation

An attempt was made to execute the RECOVER utility with the ERROR RANGE or PAGE options against an index in the informational copy pending state.

System action

Utility processing is not initiated.

User response

Use the REBUILD INDEX utility instead.

Severity

8 (error)

DSNU211I ***csect-name*** **CHECK PENDING ON** ***obj-type obj-qual.obj-name*** **PROHIBITS PROCESSING**

Explanation

The requested utility can not be run against an index in the check pending state. The index may be out of sync with its table space.

System action

Utility processing is not initiated.

User response

Run either the CHECK INDEX utility or the REBUILD INDEX utility. The CHECK INDEX utility will identify any errors (for example, if the index keys do not match the data in the table space.) If there are no errors, the check pending state will be reset. The REBUILD INDEX utility will rebuild the index from the data in the table space.

Severity

8 (error)

DSNU212I ***csect-name*** **- REORG PENDING ON TABLE SPACE** ***database.index-name*** **PROHIBITS PROCESSING**

Explanation

An attempt was made to execute a utility against a table space that is in a REORG PENDING state.

System action

Utility processing is not initiated.

User response

Execute REORG with SHRLEVEL NONE against the partitions in REORG PENDING state to rebalance the partitions and remove the REORG PENDING state.

Severity

8 (error)

DSNU213I ***csect-name*** **- AUX CHECK PENDING ON TABLE SPACE** ***table-space*** **PROHIBITS PROCESSING**

Explanation

The *processing* is prohibited because the *table-space* is in an AUX CHECK PENDING state.

System action

Utility terminates and returns completion code=8.

Programmer response

Run the CHECK DATA utility with the AUXERROR INVALIDATE option. If there are no AUX CHECK errors, AUX CHECK PENDING will be reset. If AUX CHECK errors are found, AUX CHECK PENDING will be reset and the table space will be set to an AUX WARNING state. This allows the rows with AUX CHECK errors to be corrected. Correct the errors and rerun CHECK DATA. If no more AUX CHECK errors are found, the AUX WARNING state will be reset.

DSNU214I ***csect-name*** **- REBUILD PENDING ON** ***obj-type obj-qual.obj-name*** **PROHIBITS PROCESSING**

Explanation

An attempt was made to execute a utility against an object that is in REBUILD-pending state.

System action

Utility processing is not initiated.

User response

Remove the object from the REBUILD-pending state by running REBUILD INDEX, and then resubmit the job.

Severity

8 (error)

DSNU215I ***csect-name*** **REFRESH PENDING ON** ***ob-type database.objectname*** **PROHIBITS PROCESSING**

Explanation

Db2 attempted to execute a utility against a table space or index that has refresh pending status.

System action

Utility processing is not initiated.

User response

If the object in refresh pending status is a table space, use the RECOVER utility to recover the table space to a prior point in time. You can also reload the table space with LOAD REPLACE. If the object in refresh pending status is an index, use the REBUILD INDEX utility to rebuild the index from the data.

Severity

8 (error)

DSNU231I ***csect-name*** **DICTIONARY WITH** ***n*** **ENTRIES HAS BEEN SUCCESSFULLY BUILT FROM** ***m*** **ROWS FOR TABLESPACE** ***tablespace-name***

Explanation

A compression dictionary was built for the specified table space. This message is either included in the utility output or written to the console.

csect-name
The name of the control section that issued the message.

n
The number of dictionary entries. This value depends on the number of rows that are loaded or reorganized. *n* can have one of the following values: 512, 1024, 2048, 4096, or 8192.

m
The number of rows that are used to build the dictionary.

tablespace-name
The name of the table space.

System action

Processing continues.

Severity

0 (informational)

Related tasks

Compressing your data (Db2 Performance)

Compressing data by using the LOAD utility (Db2 Utilities)

DSNU232I ***csect-name*** **KEEPDICTIONARY REQUESTED BUT COMPRESS ATTRIBUTE NOT DEFINED FOR TABLE SPACE** ***table-space-name***

Explanation

The KEEPDICTIONARY option was specified in the LOAD or REORG TABLESPACE utility statement. This keyword should only be used with table spaces that have the COMPRESS YES attribute. Otherwise, it is ignored. The COMPRESS column of SYSIBM.SYSTABLEPART contains the current compression status.

System action

Processing continues. If the dictionary exists, it is erased if LOAD REPLACE or REORG is specified.

Severity

4 (warning)

DSNU233I ***csect-name*** **COMPRESSION DICTIONARY DOES NOT EXIST FOR TABLE SPACE** ***table-space-name***

Explanation

The KEEPDICTIONARY option was specified in the LOAD or REORG TABLESPACE utility statement for a table space that does not have a compression dictionary.

System action

Processing continues. A dictionary is built for the table space.

Severity

4 (warning)

DSNU234I ***csect-name*** **COMPRESSION REPORT FOR TABLE SPACE** ***table-space-name***

Explanation

The data in the table space was compressed. This message is issued at the end of the RELOAD phase for the LOAD and REORG utility. The statistics that follow apply only to the data that was loaded or reorganized. For example, RESUME(YES) reports statistics only on the additional rows that were loaded, not what was previously in the table space.

The compression statistics follow:

noncmpbytes
The total number of uncompressed KB (where KB = 1024 bytes) for the loaded or reorganized data rows (including the row prefix). This number was rounded to the nearest KB.

cmpbytes
The total number of compressed KB for the loaded or reorganized data rows (including the row prefix). This number was rounded to the nearest KB.

percsave
The percentage of bytes saved from the loaded or reorganized data rows as a result of compression.

The values above reflect only the number of bytes for the data row and the respective row prefix (6 bytes). Db2 page and dictionary page overhead is not included.

pctrowcomp
The percentage of the rows that were compressed within the total number of rows that were loaded or reorganized. The stored length and the external length of a row was compared to determine if the row was compressed. If an EDITPROC is involved,

its effect on the length of the row is considered in the calculation.

noncmppages
The estimated number of Db2 pages required by the uncompressed data rows that were loaded or reorganized. Space required for PCTFREE and FREEPAGE is included. This number was rounded up to the next integer.

cmppages
The estimated number of Db2 pages required by the compressed data rows that were loaded or reorganized. Space required for PCTFREE and FREEPAGE is included. Dictionary pages are also included unless a LOAD RESUME(YES) was run. This number was rounded up to the next integer.

auncmprowlen
Average uncompressed row length.

avgcmprowlen
Average compressed row length.

pagesave
An estimate of the percentage of Db2 pages saved by compressing the loaded or reorganized data rows.

System action

Processing continues.

Module

noncmpbytes
KB WITHOUT COMPRESSION

cmpbytes
KB WITH COMPRESSION

percsave
PERCENT OF THE BYTES SAVED FROM COMPRESSED DATA ROWS

pctrowcomp
PERCENT OF THE LOADED ROWS WERE COMPRESSED

noncmppages
PAGES REQUIRED WITHOUT COMPRESSION

cmppages
PAGES REQUIRED WITH COMPRESSION

auncmprowlen
BYTES FOR AVERAGE UNCOMPRESSED ROW LENGTH

avgcmprowlen
BYTES FOR AVERAGE COMPRESSED ROW LENGTH

pagesave
PERCENT OF THE Db2 DATA PAGES SAVED USING COMPRESSED DATA

Severity

0 (informational)

DSNU235I *csect-name* THE COMPRESSION DICTIONARY WAS NOT BUILT FOR TABLE SPACE *ts-name reason-text*

Explanation

The compression dictionary could not be built.

csect-name
The name of the control section that issued the message.

ts-name
The name of the table space.

reason-text
The reason that the dictionary could not be built:

blank
If no reason is indicated, then insufficient data was available to build the compression dictionary.

LOAD utility
Either the input data set is empty or all of the input records were discarded.

REORG TABLESPACE utility
The table space is empty.

Dictionary built during data insertion
The partition does not yet contain enough data.

CANNOT STORE DICTIONARY
The dictionary was built but cannot be stored. This condition is usually the result of a communication error between data sharing group members.

System action

The data is not compressed.

Processing continues.

User response

Take the action that corresponds to the *reason-text* value:

blank

LOAD utility
Make sure that the input data set contains data and that the input records are not discarded by the WHEN clause or because of conversion errors.

REORG TABLESPACE utility
Make sure that the table space is populated with data.

Dictionary built during data insertion
No action is required. The data remains uncompressed. Optionally, you can:

- To build a compression dictionary on a subsequent insertion of data, use the Db2 START DATABASE command to reopen the table space or partition.
- To compress the data manually, use the REORG TABLESPACE utility.

CANNOT STORE DICTIONARY
Check that no communication error has occurred between data sharing group members. Optionally, you can:

- To build a compression dictionary on a subsequent insertion of data, use the Db2 START DATABASE command to reopen the table space or partition.
- To compress the data manually, use the REORG TABLESPACE utility.

Severity

0 (informational)

Related reference
LOAD (Db2 Utilities)
REORG TABLESPACE (Db2 Utilities)

DSNU236I ***csect-name*** **DICTIONARY FOR TABLE SPACE** ***table-space-name*** **HAS BEEN ERASED.**

Explanation

The compression dictionary of the specified table space was erased.

The COMPRESS attribute of the table space is NO, and there are no active rows in this table space. In this case, the LOAD RESUME NO utility erases the dictionary.

System action

Processing continues.

Severity

0 (informational)

DSNU241I ***csect-name*** **DICTIONARY WITH** ***n*** **ENTRIES HAS BEEN SUCCESSFULLY BUILT FROM** ***m*** **ROWS FOR TABLE SPACE** ***tablespace-name*****, PARTITION** ***part-number***

Explanation

A compression dictionary was built for the specified partition of the table space. This message is either included in the utility output or written to the console.

csect-name
The name of the control section that issued the message.

n
The number of dictionary entries. This value depends on the number of rows that are loaded or reorganized. *n* can have one of the following values: 512, 1024, 2048, 4096, or 8192.

m
The number of rows that are used to build the dictionary.

tablespace-name
The name of the table space.

part-number
The value that identifies the partition.

System action

Processing continues.

Severity

0 (informational)

Related tasks
Compressing your data (Db2 Performance)
Compressing data by using the LOAD utility (Db2 Utilities)

DSNU242I ***csect-name*** **KEEPDICTIONARY REQUESTED BUT COMPRESS ATTRIBUTE NOT DEFINED ON TABLE SPACE** ***table-space-name*****, PARTITION** ***part-num***

Explanation

Either the KEEPDICTIONARY option was specified in the LOAD or REORG TABLESPACE utility statement or the COPYDICTIONARY option was specified in a LOAD utility statement. These keywords should be used only with table space partitions that have the COMPRESS YES attribute. Otherwise, it is ignored. The COMPRESS column of SYSIBM.SYSTABLEPART contains the current compression status.

System action

Processing continues. If the dictionary exists, it is erased if either LOAD REPLACE or REORG is specified.

Severity

4 (warning)

DSNU243I ***csect-name* COMPRESSION DICTIONARY DOES NOT EXIST FOR TABLE SPACE *table-space-name*, PARTITION *part-num***

Explanation

Either the KEEPDICTIONARY option was specified in the LOAD or REORG TABLESPACE utility statement or the COPYDICTIONARY option was specified in a LOAD utility statement for a table space partition that does not have a compression dictionary.

System action

Processing continues. If KEEPDICTIONARY was specified, a dictionary is built for the table space partition. If COPYDICTIONARY was specified, no dictionaries are copied.

Severity

4 (warning)

DSNU244I ***csect-name* COMPRESSION REPORT FOR TABLE SPACE *table-space-name*, PARTITION *part-num***

Explanation

The data in the table space partition was compressed. This message is issued at the end of the RELOAD phase for the LOAD and REORG utility. The statistics that follow apply only to the data that was loaded or reorganized. For example, RESUME(YES) reports statistics only on the additional rows that were loaded, not what was previously in the table space.

The compression statistics follow:

noncmpbytes
The total number of uncompressed KB (where KB = 1024 bytes) for the loaded or reorganized data rows (including the row prefix). This number was rounded to the nearest KB.

cmpbytes
The total number of compressed KB for the loaded or reorganized data rows (including the row prefix). This number was rounded to the nearest KB.

percsave
The percentage of bytes saved from the loaded or reorganized data rows as a result of compression.

The values above reflect only the number of bytes for the data row and the respective row prefix (6 bytes). Db2 page and dictionary page overhead is not included.

pctrowcomp
The percentage of the rows that were compressed within the total number of rows that were loaded or reorganized. The stored length and the external length of a row was compared to determine if the row was compressed. If an EDITPROC is involved, its effect on the length of the row is considered in the calculation.

noncmppages
The estimated number of Db2 pages required by the uncompressed data rows that were loaded or reorganized. Space required for PCTFREE and FREEPAGE is included. This number was rounded up to the next integer.

cmppages
The estimated number of Db2 pages required by the compressed data rows that were loaded or reorganized. Space required for PCTFREE and FREEPAGE is included. Dictionary pages are also included unless a LOAD RESUME(YES) was run. This number was rounded up to the next integer.

auncmprowlen
Average uncompressed row length.

avgcmprowlen
Average compressed row length.

pagesave
An estimate of the percentage of Db2 pages saved by compressing the loaded or reorganized data rows.

System action

Processing continues.

Module

noncmpbytes
KB WITHOUT COMPRESSION

cmpbytes
KB WITH COMPRESSION

percsave
PERCENT OF THE BYTES SAVED FROM COMPRESSED DATA ROWS

pctrowcomp
PERCENT OF THE LOADED ROWS WERE COMPRESSED

noncmppages
PAGES REQUIRED WITHOUT COMPRESSION

cmppages
PAGES REQUIRED WITH COMPRESSION

auncmprowlen
BYTES FOR AVERAGE UNCOMPRESSED ROW LENGTH

avgcmprowlen
BYTES FOR AVERAGE COMPRESSED ROW LENGTH

pagesave
PERCENT OF THE Db2 DATA PAGES SAVED USING COMPRESSED DATA

Severity

0 (informational)

DSNU245I ***csect-name* THE COMPRESSION DICTIONARY WAS NOT BUILT FOR TABLE SPACE *ts-name*, PARTITION *partition-number* *reason-text***

Explanation

The compression dictionary could not be built.

csect-name
The name of the control section that issued the message.

ts-name
The name of the table space.

partition-number
The partition number.

reason-text
The reason that the dictionary could not be built:

blank
If no reason is indicated, then insufficient data was available to build the compression dictionary.

LOAD utility
Either the input data set is empty or all of the input records were discarded.

REORG TABLESPACE utility
The partition is empty.

Dictionary built during data insertion
The partition does not yet contain enough data.

CANNOT STORE DICTIONARY
The dictionary was built but cannot be stored. This condition is usually the result of a communication error between data sharing group members. Optionally, you can:

- To build a compression dictionary on a subsequent insertion of data, use the Db2 START DATABASE command to reopen the table space or partition.
- To compress the data manually, use the REORG TABLESPACE utility.

System action

The data is not compressed.

Processing continues.

User response

Take the action that corresponds to the *reason-text* value:

blank

LOAD utility
Make sure that the input data set contains data and that the input records are not discarded by the WHEN clause or because of conversion errors.

REORG TABLESPACE utility
Make sure that the partition is populated with data.

Dictionary built during data insertion
No action is required. The data remains uncompressed. Optionally, you can:

- To build a compression dictionary on a subsequent insertion of data, use the Db2 START DATABASE command to reopen the table space or partition.
- To compress the data manually, use the REORG TABLESPACE utility.

CANNOT STORE DICTIONARY
Check that no communication error has occurred between data sharing group members.

Severity

0 (informational)

Related reference
LOAD (Db2 Utilities)
REORG TABLESPACE (Db2 Utilities)

DSNU246I ***csect-name* DICTIONARY FOR TABLE SPACE *table-space-name*, PARTITION *part-num* HAS BEEN ERASED.**

Explanation

The compression dictionary of the specified partition of the table space was erased.

The COMPRESS attribute of the table space partition is NO, and there are no active rows in this partition. In this case, the LOAD RESUME NO utility erases the dictionary.

System action

Processing continues.

Severity

0 (informational)

DSNU247I ***csect-name* FROM TABLE SPACE *table-space-name*, PARTITION *part-num1* COPIED to PARTITION *part-num2***

Explanation

A compression dictionary from partition *part-num1* was successfully copied to *part-num2* for the specified table space.

System action

Processing continues.

Severity

0 (informational)

DSNU250I ***csect-name* UNLOAD PHASE COMPLETE, ELAPSED TIME = *hh/mm/ss***

Explanation

The UNLOAD phase of the REORG utility completed normally. The time that elapsed between the beginning of the REORG utility and the completion of the UNLOAD phase was hh/mm/ss, hours, minutes, and seconds, respectively.

System action

Action subsequent to this message depends on the UNLOAD option of the REORG utility statement:

- If the UNLOAD option is CONTINUE, execution of the utility continues into the RELOAD phase.
- If the UNLOAD option is PAUSE, execution of the utility is stopped at the beginning of the RELOAD phase.
- If the UNLOAD option is ONLY or EXTERNAL, the REORG utility is finished. Processing continues to the next utility in the utility job step, or, if there are no more utility statements, the utility job step terminates normally.

Operator response

The operator's response depends on the UNLOAD option of the REORG statement:

- If the UNLOAD option is CONTINUE, no operator response is required. The execution of the REORG utility is proceeding.
- If the UNLOAD option is PAUSE, further processing is dependent upon restarting the utility job step with the RESTART(PHASE) option. Until that time, resources are held exclusively by the REORG utility job step.
- If the UNLOAD option is ONLY or EXTERNAL, the REORG utility processing is complete. The data set defined by the DD statement nominated by the UNLDDN option is available for installation disposition.

User response

The user's response depends on the UNLOAD option in the REORG utility statement.

- If the UNLOAD option is CONTINUE, no user response is required. The message is informational only.
- If the UNLOAD option is PAUSE, the REORG utility is stopped in the reload phase. To complete the REORG process, the user must explicitly restart the utility job step using the RESTART(PHASE) option.
- If the UNLOAD option is ONLY or EXTERNAL, the REORG utility has completed, and the requested output is on the data set identified by the DD statement of the UNLDDN REORG utility statement option.

Severity

0 (informational)

DSNU251I ***csect-name* UNLOAD PHASE STATISTICS. NUMBER OF RECORDS UNLOADED= *mmmmmm* FOR *obj-type obj-qual.obj-name* PART *nn***

Explanation

This message is issued at the completion of the UNLOAD phase of the REORG utility. It gives the number of records that were unloaded *mmmmmm* for partition *nn* of the tablespace, index, or indexspace that was specified. The count can indicate the amount of processing.

System action

Only valid table records are unloaded. Dropped table record counts are not reported.

Operator response

Count can be indicative of the amount of processing that remains.

User response

The record count represents the current cardinality of the table or index that was indicated in the error message. Consider invoking the RUNSTATS utility and then rebinding the involved PLANs if this value differs greatly from the SYSTABLE.CARD value so that the SQL optimizer can bring the PLANs up to date.

Severity

0 (informational)

DSNU252I ***csect-name*** **UNLOAD PHASE STATISTICS. NUMBER OF RECORDS UNLOADED=** ***mmmmmm*** **FOR** ***obj-type obj-qual.obj-name***

Explanation

This message is issued at the completion of the UNLOAD phase of the REORG utility. It gives the number of records that were unloaded *mmmmmm* for the tablespace, index, or indexspace that was indicated in the error message.

System action

Only valid table or index records are unloaded. Dropped table record counts are not reported.

Operator response

Count can be indicative of the amount of processing remaining.

User response

Record count represents the current cardinality of the table or index that was specified in the error message. Invocation of the RUNSTATS utility and a subsequent rebinding of the involved PLANs should be considered if this value differs greatly from the SYSTABLE.CARD value, so that the SQL optimizer can bring the PLANs up to date.

Severity

0 (informational)

DSNU253I ***csect-name*** **UNLOAD PHASE STATISTICS. NUMBER OF RECORDS** ***action*****=** ***mmmmmm*** **FOR TABLE** ***table-name***

Explanation

This message is issued at the completion of the UNLOAD phase of the REORG utility. If *action* is "UNLOADED", it gives the number of records *mmmmmm* that were unloaded for the specified table name. If *action* is "DISCARDED", it gives the number of records *mmmmmm* that were discarded for the specified table name.

System action

Table records were unloaded or discarded.

Severity

0 (informational)

DSNU254I ***csect-name*** **- RECORD COUNTS INCONSISTENT FOR** ***pppppppp*** **PHASE, NUMBER OF RECORDS EXPECTED =** ***nnnnnnn*****, NUMBER OF RECORDS PROCESSED =** ***aaaaaaaa***

Explanation

This message is issued during the *pppppppp* phase for the REORG utility to report the condition where the number of records, *nnnnnnn*, passed to the current phase is not equal to the number of records, *aaaaaaaa*, processed in this phase.

System action

Processing continues if UNLOAD PAUSE option was used.

System programmer response

Determine the failing environment. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

User response

Check if unload data set was altered by user. Determine if the inconsistent record counts between the unload and reload phases is a potential problem. If it is an internal Db2 problem, report to system programmer.

Problem determination

If the unload data set was manipulated by user during restart process, make sure it was handled properly. If you suspect an error in Db2, you might need to report the problem. For information about identifying and

reporting the problem, see Collecting diagnostic data (Collecting data).

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

Severity

4 (warning)

DSNU255I ***csect-name* - KEY COUNT INCONSISTENT FOR *utility-phase* PHASE, NUMBER OF KEYS EXPECTED = *expected-keys*, NUMBER OF KEYS PROCESSED = *processed-keys*.**

Explanation

This message is issued during the *utility-phase* phase for the LOAD or REORG utility to report the condition where the number of keys, *expected-keys*, passed to the current phase is not equal to the number of keys, *processed-keys*, processed in this phase. One or more of the affected indexes might be inconsistent.

System action

Processing stops and all indexes are placed in rebuild pending state.

System programmer response

Determine the failing environment. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

User response

TERM the utility and re-access the indexes by running REPAIR utility to reset the rebuild-pending states on indexes. Run the CHECK INDEX utility to determine if any of the affected indexes are inconsistent. Inconsistent indexes can be rebuilt by the REBUILD INDEX utility.

Problem determination

If the working data set was manipulated by the user during the restart process, make sure it was handled properly.

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Severity

8 (error)

Related reference

LOAD (Db2 Utilities)
REORG TABLESPACE (Db2 Utilities)
-TERM UTILITY (Db2) (Db2 Commands)
REORG INDEX (Db2 Utilities)
REPAIR (Db2 Utilities)
CHECK INDEX (Db2 Utilities)
REBUILD INDEX (Db2 Utilities)

DSNU256I ***csect-name* INVALID PARTITION SPECIFICATION**

Explanation

An invalid PART option was specified.

csect-name
The name of the control section that issued the message.

The PART option is invalid in the following situations:

- When it is specified for a nonpartitioned table space.
- If the indicated PART integer is not pertinent to the partitions existing for the indicated table space.
- If a ROWID column is part of the partitioning key.
- If LOAD INTO TABLE PART *x* is performed on a table space where an identity column is part of the partitioning key
- If LOAD INTO TABLE PART *x* is performed on a partition-by-growth table space
- If REORG PART *x* is performed on a partition-by-growth hash table space
- If LOAD INTO TABLE PART *x* REPLACE is performed on a table space that is being converted to hash table space
- When the table space is placed in the restrictive REORG-pending (REORP) state because a RECOVER job was run on the table space to recover the data to a point in time prior to the materialization of pending definition changes

System action

The error is sufficient to terminate further processing of the utility job step. The utility job step is terminated, and resources are released to their previous state.

User response

Determine the correct partition specification for the table space that was the subject of the specified control utility statement, and resubmit the utility job step. Examine the SYSIBM.SYSTABLESPACE in the Db2 catalog for the correct range of partition numbers for the table space.

If a partition-level operation is not allowed, modify the utility job for table-space-level operations.

Related reference

CHECK DATA (Db2 Utilities)
LOAD (Db2 Utilities)
QUIESCE (Db2 Utilities)
REORG TABLESPACE (Db2 Utilities)
REPAIR (Db2 Utilities)
SYSTABLESPACE catalog table (Db2 SQL)

DSNU257I ***csect-name*** **UNABLE TO RESTART BUILD PHASE**

Explanation

Restarting in the BUILD PHASE or the SORTBLD phase of the LOAD utility with the RESUME(YES) option is not permitted.

System action

Utility processing is not initiated.

User response

Recover all indexes within the table space which were left in a rebuild pending state when the LOAD utility failed.

Problem determination

Check the constraints for restarting the LOAD utility.

Severity

8 (error)

Related concepts

Restart of LOAD (Db2 Utilities)

Related reference

Syntax and options of the LOAD control statement (Db2 Utilities)

DSNU258I ***csect-name*** **BUILD PHASE STATISTICS. NUMBER OF INDEXES =** ***mmm***

Explanation

This message is issued at normal completion of the BUILD phase of the LOAD or REORG or REBUILD INDEX utility. The number of indexes that were updated is indicated as 'mmm'.

System action

The BUILD phase of either the LOAD or REORG or REBUILD INDEX utility is completed. Upon completion of the utility job step, they are available for REFERENCE processing.

Severity

0 (informational)

DSNU259I ***csect-name*** **BUILD PHASE COMPLETE, ELAPSED TIME =** ***hh/mm/ss***

Explanation

This message is issued at the normal completion of the BUILD phase of the REORG, LOAD, and REBUILD INDEX utilities. The time that has elapsed between the beginning of the phase and the completion of this phase was 'hh' hours, 'mm' minutes, and 'ss' seconds.

System action

Processing continues to the next phase of the LOAD or REORG or REBUILD INDEX utility. If this is the last phase, processing continues to the next utility statement in the utility job step, if any.

DSNU260I ***csect-name obj-type obj-qual.obj-name*** **IS EMPTY**

Explanation

This message is issued as a warning when REBUILD INDEX(ALL) or REORG TABLESPACE are executed on an empty table space.

This message is also issued when COPY detects that the first space map page in the table space or partition is missing. This is an error condition that might be caused by a delete and redefine of the data set outside of Db2, or by a previous Db2 failure that occurred on the data set.

System action

For REBUILD INDEX or REORG TABLESPACE, the return code of 4 will allow the next utility function in the job step, if any, to be initiated.

For COPY, the table space, index space, or partition being copied will be placed in recover pending status.

The return code of 8 will prohibit further utility processing in the job step.

System programmer response

If the return code is 8, the table space, indexspace, or partition being copied should be recovered with the RECOVER utility.

User response

Notify the system programmer if the return code is 8. If the return code is 4, no action is required.

Severity

4 (warning) or 8 (error)

DSNU269I ***csect-name* FIELD *field-name* IS NOT ALLOWED**

Explanation

You specified a GENERATED ALWAYS column in the field specification list. Only a column that is defined as GENERATED BY DEFAULT is allowed to be specified in the field specification list.

Identity columns or row change timestamp columns that were defined as GENERATED ALWAYS cannot be specified in a LOAD field specification list. Also, they cannot be implied in LOAD FORMAT UNLOAD or LOAD with no field specification list.

System action

The LOAD utility terminates.

User response

Omit the GENERATED ALWAYS column or identity column from the LOAD field specification list and rerun the job.

Severity

8 (error)

DSNU270I ***csect-name* - *table-name*,*column-name* IN VIOLATION OF INSTALLATION DEFINED FIELD PROCEDURE *procedure-name*.*function-code*, *return-code*, *reason-code*, *message-token***

Explanation

An installation-supplied field procedure has returned an error during encoding for LOAD or decoding for REORG. SQLCODE -681 contains more detailed information.

csect-name
The name of the control section that issued the message.

table-name
The name of the table.

column-name
The name of the column.

procedure-name
The name of the stored procedure.

function-code
The function code.

return-code
A numeric value that indicates the reason for the failure.

reason-code
The Db2 reason code value that indicates the reason for the failure. For explanations of reason codes, see Db2 reason codes (Db2 Codes).

message-token
The message token.

System action

The utility issues a system '04E' abend with a reason code of '00E40336'.

System programmer response

Examine the field procedure to determine why an error return code was generated.

User response

Request the dump produced as a result of the error to the system programmer so that the cause of the error can be determined and corrected.

Severity

8 (error)

Related reference
LOAD (Db2 Utilities)
REORG TABLESPACE (Db2 Utilities)
Related information
-681 (Db2 Codes)
00E40336 (Db2 Codes)

DSNU271I ***csect-name* - REORG PENDING ON FOR TABLE SPACE *database.index-name* PART *part number* PROHIBITS PROCESSING**

Explanation

An attempt was made to execute a REORG utility to redistribute data in a partitioned table space. The partition number stated in this message was found to have the REORP state on, but was not specified on the PART *n1*:*n2* parameter of the REORG utility.

If you are running REORG to materialize identity column values, you must reorganize the entire table space.

System action

Utility processing is not initiated.

System programmer response

Identify the correct partition range specification for the REORG utility by issuing the DISPLAY command for the table space, and resubmit the utility job step.

Severity

8 (error)

DSNU272I ***csect-name*** **- FIELD PROCEDURE** ***procedure-name*** **COULD NOT BE LOADED**

Explanation

An installation supplied field procedure could not be loaded during encoding for LOAD or decoding for REORG. See SQLCODE -682 for more detail.

System action

The utility will terminate with a return code of 8.

System programmer response

Determine why the field procedure could not be loaded.

User response

Take the job output to the system programmer.

Severity

8 (error)

DSNU274I ***csect-name*** **- REORG SHRLEVEL REFERENCE OR CHANGE WITH REBALANCE DOES NOT APPLY PENDING DEFINITION CHANGES FOR** ***database-name.tablespace-name*****.**

Explanation

The object was reorganized, but no pending definition changes were materialized.

csect-name
The name of the control section that issued the message.

database-name.tablespace-name
The name of the table space, qualified by the name of the database.

System action

Utilities continue to process.

User response

Use the REORG utility with SHRLEVEL REFERENCE or CHANGE without REBALANCE against the entire table space to materialize pending definition changes.

Severity

4 (warning)

Related reference
REORG TABLESPACE (Db2 Utilities)

DSNU275I ***csect-name*** **- PENDING DEFINITION CHANGES ARE NOT APPLIED FOR INDEX,** ***database-name.index-name*** **BECAUSE THERE ARE PENDING DEFINITION CHANGES AT THE TABLESPACE LEVEL.**

Explanation

Pending definition changes at the index level were not applied because pending definition changes exist at the table space level. This message is issued in response to the REORG INDEX utility.

csect-name
The name of the control section that issued the message.

database-name.index-name
The name of the index, qualified by the name of the database.

System action

Utilities continue to process.

User response

Execute REORG TABLESPACE with SHRLEVEL REFERENCE or SHRLEVEL CHANGE against the entire

table space to materialize pending definition changes at both the table space level and index level.

Severity

4 (warning)

Related reference

REORG INDEX (Db2 Utilities)

DSNU280I ***csect-name*** **- ERROR=X'reason-code' FROM EDIT ROUTINE** ***procedure-name*** **FOR** ***table-name***

Explanation

The edit routine provided by your installation has returned an error during the load of a record into the table indicated. The reason code is set by the edit routine.

System action

The LOAD or REORG utility will receive ABEND04E RC00E40323.

System programmer response

Verify that the edit routine is correct.

User response

Correct any errors in the input data. Ensure that the edit routine provided is correct. The utility can be restarted or terminated.

Severity

8 (error)

DSNU281I ***csect-name*** **RECORD** ***(n)*** **OF TABLE** ***table-name*** **VIOLATING VALID ROUTINE** ***validproc-name*****, ERROR CODE=X'reason-code'**

Explanation

The validation exit routine provided by your installation blocked the load of record 'n' into TABLE 'table-name'. The reason-code was set by the exit routine.

System action

The LOAD utility continues to process the following input record.

System programmer response

Verify that the validation routine is correct.

User response

Check the error input records against the error reason code returned from the validation procedure.

Severity

4 (warning)

Related reference

Syntax and options of the LOAD control statement (Db2 Utilities)

DSNU282I ***csect-name*** **UNABLE TO RESTART AT LAST CHECKPOINT WITH DDNAME** ***'dddddddd'***

Explanation

The data set with DDNAME *dddddddd* is a concatenated data set and the utility can be restarted only at the beginning of the phase (RESTART PHASE), not at the last checkpoint (RESTART CURRENT).

System action

The utility will issue a system '04E' abend with a reason code of '00E40323'.

User response

Change the RESTART option to RESTART PHASE and resubmit the job step.

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

Severity

8

DSNU283I ***csect-name error-type*** **SQLCODE =** ***sqlcode*****, SQLERRM =** ***sqlerrm*****, SQLSTATE =** ***sqlstate*****, SQLERRP =** ***sqlerrp*****, SQLERRD =** ***sqlerrd1 sqlerrd2 sqlerrd3 sqlerrd4 sqlerrd5 sqlerrd6***

Explanation

An error occurred that returned SQLCA error information to the utility. This message contains multiple components.

csect-name
The name of the control section that issued the message.

error-type
Indicates the type of error:

- Trigger error
- LOB error
- XML error
- Key evaluation error
- Application of pending definition change

sqlcode
The SQL return code. A negative number indicates that an error has occurred.

sqlerrm
A length indicator and one or more tokens, separated by X'FF', that are substituted for variables in the descriptions of error conditions. It may contain truncated tokens. A length of 70 bytes might indicate a possible truncation.

sqlstate
A return code for the outcome of the most recent execution of an SQL statement

sqlerrp
The name of the procedure that detected the error.

sqlerrd1* through *sqlerrd6
SQL diagnostic information. Each field contains a value that indicates the number of rows that qualified for the SQL statement, the number of rows in the result table, a rough estimate of required resources, or an internal error code.

System action

Processing terminates.

For the LOAD utility with a DISCARD data set, the rows that encounter the error are placed in the discard file. Otherwise the utility abends.

User response

Determine the cause for the SQL error by using information about the specific SQLCODE. Correct the error and run the utility again.

Severity

8 (error)

Related concepts
SQL error codes (Db2 Codes)
Related reference
Description of SQLCA fields (Db2 SQL)

DSNU284I ***csect-name*- LOAD UTILITY NOT ALLOWED AGAINST A SYSTEM-MAINTAINED MATERIALIZED QUERY TABLE *table-name***

Explanation

An attempt has been made to run the LOAD utility against a system-maintained materialized query table. This is not allowed.

System action

Utility processing terminates.

User response

If the table name was incorrect, correct the table name and resubmit the utility job step. Otherwise, take one of the following actions:

- Use the REFRESH TABLE SQL statement to insert data into the system-maintained materialized query table.
- Use the ALTER statement to change the materialized query table to a user-maintained materialized query table or a base table, and resubmit the utility job step.

Severity

8

DSNU285I ***csect-name* - SWITCHTIME = *switchtime-value* NEWMAXRO = *newmaxro-value* SECONDS**

Explanation

This message might be displayed in one of the following circumstances:

- As part of the output from the DISPLAY UTILITY command
- As part of the output from the TERM UTILITY command
- When the REORG INDEX or REORG TABLESPACE utility estimates that the SWITCH phase will not start by the deadline that is specified in the DEADLINE option

This message is described as part of the DISPLAY UTILITY output in "DSNU100I" on page 633.

DSNU286I ***csect-name* REORG TABLESPACE *dbname.tsname* OFFPOSLIMIT SYSINDEXPART ROWS**

Explanation

This is the header message for the SYSINDEXPART section of the REORG TABLESPACE OFFPOSLIMIT output. This section lists the SYSINDEXPART rows for the table space or table space partition as specified in the REORG TABLESPACE input statement. The fields from SYSINDEXPART are:

CREATOR
Index creator name

IXNAME
Index name

CREATOR
Table creator name

TBNAME
Table name

PART
Partition number

CARDF
Number of rows referenced (floating point)

FAROFFPOSF
Number of rows referenced afar (floating point)

NEAROFFPOSF
Number of rows referenced nearby (floating point)

STATSTIME
TIMESTAMP of RUNSTATS update

Rows which meet the OFFPOSLIMIT criteria are prefaced with '*'.

System action

Processing continues normally

User response

If the TIMESTAMP reported in the STATSTIME column is not recent, the OFFPOSLIMIT criteria might be evaluated with obsolete statistics.

Severity

0 (informational)

DSNU287I ***csect-name*** **REORG TABLESPACE** ***dbname.tsname*** **INDREFLIMIT SYSTABLEPART ROWS**

Explanation

This is the header message for the SYSTABLEPART section of the REORG TABLESPACE INDREFLIMIT output. This section lists the SYSTABLEPART rows for the table space or table space partition as specified in the REORG TABLESPACE input statement. The fields from SYSTABLEPART are:

DBNAME
Database name

TSNAME
Table space name

PART
Partition number

CARD
Number of rows in table space

FARINDREF
Number of rows relocated afar

NEARINDREF
Number of rows relocated nearby

STATSTIME
TIMESTAMP of RUNSTATS update

Rows which meet the INDREFLIMIT criteria are prefaced with '*'.

System action

Processing continues normally

User response

If the TIMESTAMP reported in the STATSTIME column is not recent, the INDREFLIMIT criteria might be evaluated with obsolete statistics.

Severity

0 (informational)

DSNU288I ***csect-name*** **REORG INDEX** ***dbname.ixname*** **LEAFDISTLIMIT SYSINDEXPART ROWS**

Explanation

This is the header message for the SYSINDEXPART section of the REORG INDEX LEAFDISTLIMIT output. This section lists the SYSINDEXPART rows for the index or index partition as specified in the REORG INDEX input statement. The fields from SYSINDEXPART are:

CREATOR
Index creator name

IXNAME
Index name

PART
Partition number

LEAFDIST
Number of pages between leaf pages multiplied by 100

STATSTIME
TIMESTAMP of RUNSTATS update

Rows which meet the LEAFDISTLIMIT criteria are prefaced with '*'.

System action

Processing continues normally

User response

If the TIMESTAMP reported in the STATSTIME column is not recent, the LEAFDISTLIMIT criteria might be evaluated with obsolete statistics.

Severity

0 (informational)

DSNU289I *csect-name type* REORG LIMITS HAVE BEEN MET

Explanation

The REORG utility is indicating whether any specified limits have been met. For REORG TABLESPACE, this might be the OFFPOSLIMIT or the INDREFLIMIT. For REORG INDEX, this is the LEAFDISTLIMIT. *type* values:

NO
If no limits are met.

blank
If at least one limit is met.

System action

Utility processing continues.

User response

If the REPORTONLY option is specified and the result of this job step is not used to conditionally execute other job steps, examine the utility messages for this table space, partition, or index to determine if a REORG should be performed.

Severity

The return codes are:

1 (informational)
If no limit is met.

2 (informational)
If at least one limit is met.

DSNU290I *csect-name type* REORG WILL BE PERFORMED

Explanation

The REORG utility is indicating whether any specified limits have been met and whether a REORG will be performed. For REORG TABLESPACE, this might be the OFFPOSLIMIT or the INDREFLIMIT. For REORG INDEX, this is the LEAFDISTLIMIT. *type* values:

NO
If no limits are met.

blank
If at least one limit is met.

System action

Utility processing continues. A REORG is performed if any limits are met.

Severity

0 (informational)

DSNU291I MAXIMUM COMPOSITE UNLOAD RECORD SIZE TOO LARGE FOR SORT. SORTDATA KEYWORD IS IGNORED.

Explanation

The SORTDATA keyword was specified for a REORG utility job. However, the largest possible record in the table space, prefixed by the largest key, produces a composite record that is too large to be processed by the SORT component. The SORTDATA keyword is ignored.

System action

Processing continues normally.

User response

If you must use SORTDATA for the table space, try reducing the size of either the largest record or key field by redefining the table. In some cases, changing a field from LONG VARCHAR to VARCHAR with a specified maximum length might help.

Problem determination

This problem should only occur on a table space with a 32KB page size. Analyze the requirement for maximum data length in VARCHAR and LONG VARCHAR columns to see if a shorter length can be specified. It might be necessary to remove the SORTDATA keyword from the utility statement.

Severity

0

DSNU292I *csect-name* - -ALTER UTILITY CANNOT APPLY TO THIS UTILITY, REASON=*c*

Explanation

The -ALTER UTILITY command applies only to a job that is executing REBUILD with SHRLEVEL CHANGE, REORG with SHRLEVEL REFERENCE, or REORG with SHRLEVEL CHANGE. In addition, if the -ALTER UTILITY command specifies MAXRO, LONGLOG, or DELAY, the job must be executing REBUILD with SHRLEVEL CHANGE, or, REORG with SHRLEVEL CHANGE.

The reason code indicates the specific type of error:

1
The job to which the -ALTER UTILITY command applies is not executing REBUILD with SHRLEVEL CHANGE, REORG with SHRLEVEL REFERENCE, or REORG with SHRLEVEL CHANGE.

2
The job to which the -ALTER UTILITY command applies is executing REORG with SHRLEVEL REFERENCE, but the -ALTER UTILITY command specifies MAXRO, LONGLOG, or DELAY.

3
The job to which the -ALTER UTILITY command applies is executing REBUILD with SHRLEVEL change, but the -ALTER UTILITY command specifies DEADLINE.

System action

-ALTER UTILITY does not execute.

User response

Apply -ALTER UTILITY to a job that is executing the proper utility.

Severity

8 (error)

DSNU293I ***csect-name*** **- REORG WITH SHRLEVEL REFERENCE OR CHANGE CANNOT APPLY TO THE** ***name*** **TABLE SPACE**

Explanation

REORG with SHRLEVEL REFERENCE or CHANGE cannot operate on the following catalog and directory table spaces: DSNDB06.SYSDBASE, DSNDB06.SYSDBAUT, DSNDB06.SYSGROUP, DSNDB06.SYSPLAN, DSNDB06.SYSVIEWS, and DSNDB01.DBD01.

System action

REORG does not execute.

User response

Execute REORG with SHRLEVEL NONE.

Severity

8 (error)

DSNU294I ***csect-name*** **- LARGEST COMPOSITE RECORD IS TOO BIG FOR REORG WITH SHRLEVEL CHANGE**

Explanation

SHRLEVEL CHANGE was specified for a REORG utility job, and the table has a clustering index. However, the largest possible record in the table space, prefixed by the largest key, produces a composite record that is too large to be processed by the SORT component. If the largest possible composite record to be sorted exceeds 32760 bytes in length, which is the maximum record size for a BSAM data set, REORG cannot operate if SHRLEVEL CHANGE is specified.

System action

REORG does not execute.

User response

Execute REORG with SHRLEVEL NONE or REFERENCE and specify SORTDATA NO. If you must use SHRLEVEL CHANGE for the table space, try reducing the size of either the largest record or key field by redefining the table. In some cases, changing a field from LONG VARCHAR to VARCHAR with a specified maximum length might help.

Problem determination

This problem should only occur on a table space with a 32KB page size. Analyze the requirement for maximum data length in VARCHAR and LONG VARCHAR columns to see whether a shorter length can be specified.

Severity

8 (error)

Related reference

Data sets that REORG INDEX uses (Db2 Utilities)

Data sets that REORG TABLESPACE uses (Db2 Utilities)

DSNU295I ***csect-name*** **- IN** ***utility-phase*** **PHASE OF** ***utility-name*** **WITH SHRLEVEL REFERENCE OR**

CHANGE, DATA SET *name* COULD NOT BE DELETED

Explanation

For the table space or partition that is being reorganized or loaded, REORG with SHRLEVEL REFERENCE or CHANGE or LOAD with SHRLEVEL REFERENCE unloads data from the original data sets and reloads data into shadow data sets. REORG or LOAD then exchanges the names of the original and shadow data sets.

csect-name
The name of the control section that issued the message.

utility-phase
The phase of the utility that was running when the error occurred.

utility-name
The name of the utility that was running when the error occurred.

name
The name of the data set that could not be deleted.

The original name of a data set is in this form:

```
catname.DSNDBx.dbname.psname.I0001.Annn
```

The name of a shadow data set is in this form:

```
catname.DSNDBx.dbname.psname.J0001.Annn
```

The utility uses those data sets for indexes as well as data.

If a data set is Db2-managed, the UTILTERM phase of the utility deletes the shadow data set, which was the original data set. This message indicates that the shadow data set *name* could not be deleted.

System action

The utility continues execution, but it does not delete the specified data set.

User response

Try to delete the data set. If you cannot delete it, notify the system programmer.

Severity

4 (warning)

DSNU296I ***csect-name* - IN REORG WITH SHRLEVEL REFERENCE OR CHANGE, DATA SET *name* DOES NOT EXIST, CONTEXT=*c***

Explanation

For the area (table space or partition) being reorganized, REORG with SHRLEVEL REFERENCE or CHANGE unloads data from the original data sets and reloads data into shadow data sets. REORG then exchanges the names of the original and shadow data sets, using temporary names during the renaming. The original name of a data set is in the form "*catname*.DSNDB*x*.*dbname*.*psname*.I0001.A*nnn*". The shadow name of a data set is in the form "*catname*.DSNDB*x*.*dbname*.*psname*.J0001.A*nnn*". The temporary name of a data set is in the form "*catname*.DSNDB*x*.*dbname*.*psname*.T0001.A*nnn*". REORG uses such data sets for indexes as well as data.

During its initialization, REORG cannot execute if:

- Data sets with the temporary names already exist
- Db2-managed data sets with the shadow names already exist
- User-managed data sets with the shadow names do not already exist

To exchange the names of the original and shadow data sets, REORG renames in the following ways:

1
In the switch phase, it renames the original data set from the original name to the temporary name.

2
In the switch phase, it renames the shadow data set from the shadow name to the original name.

3
In the utilterm phase, it renames the original data set from the temporary name to the shadow name (for user-managed data sets). It deletes the temporary name for Db2-managed data sets.

If either a -TERM UTILITY command is issued, or the REORG switch phase is restarted after REORG has begun renaming data sets, the names revert back to their original form prior to the utilterm phase of REORG:

The context code indicates the specific type of error:

1

During the switch phase of REORG, on rename 1, REORG detected that a data set with an original name does not exist. This error condition can arise for a Db2-managed or user-managed data set.

During the switch phase restart or a -TERM UTILITY during the switch phase, on rename 4, REORG detected that a data set with an original name does not exist. This error condition can arise for a Db2-managed or user-managed data set.

2

During the switch phase of REORG, on rename 2, REORG detected that a data set with a shadow name does not exist. This error condition can arise for a Db2-managed or user-managed data set.

During the switch phase restart or a -TERM UTILITY during the switch phase, on rename 5, REORG detected that a data set with a shadow name does not exist. This error condition can arise for a Db2-managed or user-managed data set.

3

During the utilterm phase of REORG, on rename 3, REORG detected that a data set with a temporary name does not exist. This error condition can arise for a user-managed data set.

7

During initialization of REORG, REORG detected that the shadow data set did not exist. This error can only occur with a table space, index, or partition that is stored in user-managed data sets.

System action

For context codes 1 or 2, utility processing is abended. ABEND reason code 00E4031B is issued. The object is left in a recovery pending state.

For context code 3, the utility job step that caused the function to be requested continues with no renaming. The utility job is placed in the stopped state. The object is left in a recovery pending state, and a message will be issued.

For context code 7, REORG does not execute.

For context codes 1, 2, or 3, the following messages are issued:

- If the data set is part of a nonpartitioned table space, the object is the table space, and the message is DSNU562I.
- If the data set is part of a partition of a table space, the object is the partition, and the message is DSNU560I.
- If the data set is part of a nonpartitioned index, the object is the index, and the message is DSNU557I.
- If the data set is part of a partition of a partitioned index, the object is the partition of the index, and the message is DSNU559I.

User response

For context codes 1 or 2, execute the RECOVER TABLESPACE or RECOVER or REBUILD utilities.

For context code 3, do nothing.

For context code 7, define all shadow objects prior to running REORG.

Severity

4 (warning) or 8 (error)

DSNU297I ***csect-name*** **COMPOSITE RECORD SIZE TOO LARGE FOR** ***table-name***

Explanation

The size of the record that would be unloaded for REORG DISCARD or REORG UNLOAD EXTERNAL is greater than the largest allowed data set logical record length (32760 bytes).

System action

The utility will terminate with a return code of 8.

User response

If you are attempting to discard records during REORG, you will have to use SQL to DELETE the records prior to the REORG. If you are attempting to unload records in an external format, you must use an application instead. If you are using the SORTDATA option with REORG UNLOAD EXTERNAL or REORG DISCARD, try removing the SORTDATA keyword.

Problem determination

This problem will most likely occur only on a table with BLOB, CLOB, or DBCLOB columns.

Severity

8 (error)

DSNU298I ***csect-name*** **- RESTART NOT ALLOWED IN** ***phase-name*** **PHASE OF REORG WITH SHRLEVEL REFERENCE OR CHANGE**

Explanation

An attempt was made to restart the REORG utility with SHRLEVEL REFERENCE or SHRLEVEL CHANGE in the *phase-name* phase. Db2 does not allow you to restart the REORG utility with SHRLEVEL REFERENCE or SHRLEVEL CHANGE in that phase.

System action

Utility processing abends. Abend reason code 00E40018 or 00E40310 might be issued.

System programmer response

If necessary, take actions to prevent access to the table space or partition before terminating the utility.

User response

Issue the -TERM UTILITY command to terminate the utility job; then rerun the job without the RESTART parameter.

Severity

8 (error)

DSNU299I ***csect-name*** **CHARACTER CONVERSION FROM CCSID** ***from-ccsid*** **TO CCSID** ***to-ccsid*** **FAILED WITH ERROR CODE** ***error-code*** **FOR** ***object-type object-qualifier.object-name additional-information*****.**

Explanation

A conversion error occurred during the conversion of a string to a different coded character set. The error occurred during the processing of the utility statement.

csect-name
The name of the control section that issued the message.

from-ccsid
The coded character set of the string to be converted.

to-ccsid
The coded character set to which the string must be converted.

error-code
The type of error:

4
Conversion resulted in the use of incompatible substitution characters in the target of the conversion.

8
Length exception, such as expansion required for PC MIXED data that exceeds the maximum length of the string.

12
Invalid code point.

16
Form exception, such as invalid MIXED data.

20
Conversion procedure error, such as an error during Unicode/390 stage 2 conversions or an exit that set the length control field of the string to an invalid value.

24
Conversion services have not been setup correctly or the conversion is not supported.

object-type
The type of the failed object.

An *object-type* of UNKNOWN indicates that a failure has occurred in the conversion service. Db2 reason code 00E400D0 is issued, and provides additional information.

object-qualifier.object-name
The table creator ID followed by the table name. If the object is a user security label or row security label, only *object-name* is shown.

additional-information
Additional information about the table, which is provided only when *object-type* is TABLE.

COLUMN ***column-name***
The column name of the failing object. This column could be either the target or the source of the conversion.

blank
No additional information is provided for other values of *object-type*.

System action

The utility job is terminated.

User response

Generate a dump by adding the DIAGNOSE ABEND statement in the utility job and re-running the utility. If the error can be fixed, correct the error and resubmit the utility. Otherwise, issue the TERM utility command to terminate the utility.

If the error is related to security labels, use only security labels that characters that are not substituted during conversion from one CCSID to another. For example, the following national characters might be substituted:

- @ (X'7C')
- # (X'7B')
- $ (X'5B')

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Severity

8 (error)

12 (severe error)

Related information

00E400D0 (Db2 Codes)

DSNU300I ***csect-name*** **(RE)LOAD PHASE COMPLETE, ELAPSED TIME =** ***hh/mm/ss***

Explanation

The reload phase of the REORG or LOAD utility has completed normally. The elapsed time for the execution was 'hh' hours, 'mm' minutes, and 'ss' seconds.

DSNU301I ***csect-name*** **- KEYWORD 'SORTDATA' SPECIFIED AND/OR KEYWORD 'NOSYSREC' WAS SPECIFIED BUT NO CLUSTERINGINDEX EXISTS, KEYWORD IS IGNORED**

Explanation

The 'SORTDATA' keyword was specified or the 'NOSYSREC' keyword was specified for a REORG utility job, or implied by the use of SHRLEVEL CHANGE. But it was found that no clustering index existed for the table space being reorganized. The keyword is ignored and processing continues normally.

System action

Processing continues normally.

User response

If a clustering index was expected to be found for the table space being reorganized, determine the reason the index could not be found.

Problem determination

Probably a user error. Determine if a cluster index should be defined on one of the tables in the table space being reorganized. If so, define the cluster index; otherwise, remove the 'SORTDATA' and/or 'NOSYSREC' keyword from the utility statement if necessary.

Severity

0

DSNU302I ***csect-name*** **(RE)LOAD PHASE STATISTICS - NUMBER OF INPUT RECORDS PROCESSED =** ***nnnnnnn***

Explanation

This message is issued at the normal completion of the RELOAD phase of the REORG utility and the LOAD phase of the LOAD utility.

It indicates the number of records processed from the input record data set (that is, the data set identified either by the JCL DD statement identified in the UNLDDN option for REORG or the INDDN option for LOAD).

System action

The LOAD or REORG utility completes the phase in which the records are (re-)introduced into the Db2 database. This is also the last phase of the utility unless there are some indexes that need to be built and/or updated.

User response

The user can verify that the number of records (re-)loaded is consistent with expectations. For example, in REORG it matches the total number of records unloaded. For LOAD, it matches the number of records submitted minus the number of records reported rejected.

Severity

0 (informational)

DSNU303I ***csect-name*** **(RE)LOAD PHASE STATISTICS - NUMBER OF RECORDS=** ***nnnnnn*** **FOR TABLE** ***table-name*** **PART=***part-number*

Explanation

This message is issued at the normal completion of the RELOAD phase of the REORG utility and the LOAD phase of the LOAD utility.

It indicates the number of records loaded into PART 'part-number' of 'table-name' from the source record data set. This data set is identified by the JCL DD statement in the UNLDDN option for REORG, or the INDDN option for LOAD.

This message is repeated for each INTO TABLE PART clause in the LOAD utility statement or each TABLESPACE PART clause in the REORG utility statement.

System action

The LOAD or RELOAD phase maintains a separate count for each table part. Rejected rows are not included in the count. Each count is reported as a

separate message at the end of the LOAD or RELOAD phase.

The user can verify the number of records loaded or reloaded into the table part. In REORG, it should match the number of records unloaded for that table part. In LOAD, it should match the number of records processed.

Severity

0 (informational)

DSNU304I ***csect-name*** **(RE)LOAD PHASE STATISTICS - NUMBER OF RECORDS =** ***nnnnnn*** **FOR TABLE** ***table-name***

Explanation

This message is issued at the normal completion of the RELOAD phase of the REORG utility and the LOAD phase of the LOAD utility.

It indicates the number of records loaded into TABLE 'table-name' from the source record data set (that is, the data set identified by the JCL DD statement identified in the UNLDDN option for REORG, or the INDDN option for LOAD).

This message is repeated for each TABLE loaded by the current REORG or LOAD utility statement.

If the LOAD or REORG was restarted in a LOAD or RELOAD phase from the last commit point (i.e., the 'RESTART' parm was specified), 'nnnnnn' indicates the number of records loaded after the restart.

System action

The LOAD or RELOAD phase maintains a separate count for each table populated by this phase. Rejected rows are not included in the count. Each count is reported as a separate message at the end of the LOAD or RELOAD phase.

The user can verify that the number of records (re-)loaded into the table is consistent with expectations. For example, in REORG it matches the number of records unloaded for that table. For LOAD, it matches the number of records processed.

Severity

0 (informational)

DSNU305I ***csect-name*** **- TABLE=***table-name* **HAS AN INCOMPLETE TABLE DEFINITION**

Explanation

Table 'table-name' does not have an index defined to enforce the uniqueness of its primary key or unique key.

System action

Processing stops. No table in the table space is loaded.

User response

The user can resubmit the LOAD job after performing one of the following:

- Creating a unique index over the table's primary key
- Creating a unique index over the table's unique key(s)
- Dropping the definition of the table's primary key
- Dropping the definition of the table's unique key(s)

Problem determination

Issue SQL SELECT against the catalog to determine which indexes and relations exist against 'table-name'. Determine whether uniqueness of the primary key or unique key has been guaranteed through omission or through faulty definition of an index.

Severity

8 (error)

DSNU306I ***csect-name*** **- UNABLE TO DRAIN WRITERS FROM** ***object-type object-name***

Explanation

The utility was unable to drain the writers from an object because the resource was unavailable. The object is identified by type and name. Message DSNT500I tells why the resource was unavailable. If the QUIESCE utility issues this message, DSNT500I is not issued, but message DSNT501I might be issued.

System action

Utility processing terminates.

Problem determination

Refer to message DSNT500I or DSNT501I.

Severity

8 (error)

DSNU307I ***csect-name*** **PARENT TABLE** ***parent-table-name*** **OF** ***table-name*** **IN RELATIONSHIP** ***relationship-name*** **HAS AN INCOMPLETE TABLE DEFINITION**

Explanation

The 'table-name' identifies the target table of the job for the LOAD utility or the dependent table to be checked by the CHECK DATA utility. The 'parent-table-name' identifies the parent table of the target table for the LOAD utility or the dependent table for the CHECK DATA utility in RELATIONSHIP 'relationship-name'. The primary index of PARENT TABLE 'parent-table-name' has been dropped.

This message is repeated for each incompletely defined parent table in each relationship where the target table is a child.

System action

The LOAD and CHECK DATA utilities stop further processing. No data is loaded by the LOAD utility and no relationships are checked by the CHECK DATA utility.

User response

Check the existence of the primary index and its parent tables identified by RELATIONSHIP 'relationship-name'.

Problem determination

If the incompletely defined tables were targets of the LOAD job, message DSNU305I has been issued for each such table. Refer to the catalog to determine if any tables in the table space that were not targets of the LOAD job are incompletely defined.

Severity

8 (error)

DSNU308I ***csect-name*** **INDEX KEY LIST RECORD LENGTH EXCEEDS MAXIMUM KEY BUFFER SIZE**

Explanation

The length of the index key list that will be built in the Data Base Services address space while loading a data record may be larger than the maximum key buffer size. The LOAD statement may be too complex.

System action

Utility processing is terminated.

User response

Examine the preceding DSNU650I INTO TABLE statements. The key size and number of indexes affected by each INTO TABLE statement are accumulative. The combination of these elements may produce a list of index keys, including header bytes, that is too large to be contained within the maximum size buffer area during the load of each input data record. It may be necessary to reduce the number of INTO TABLE statements or to drop some of the indexes that are affected by the load.

Severity

8 (error)

DSNU309I ***csect-name*** **NOT ALL REQUIRED UNIQUE INDEXES HAVE BEEN DEFINED FOR TABLE** ***table-name***

Explanation

The table 'table-name' was created with unique index requirements. Not all of these indexes have been defined.

System action

Processing stops. No table in the table space is loaded.

User response

The user may resubmit the LOAD job after either:

- Creating all the required unique indexes, or
- Dropping the table and re-creating it without the unique index requirements.

Problem determination

Determine which unique indexes need to be created. Determine if the uniqueness requirement for the table is valid.

Severity

8

DSNU310I ***csect-name*** **RECORD '*n*' WILL BE DISCARDED DUE TO** ***field-name*** **CONVERSION ERROR FOR** ***table-name*** **ERROR CODE** ***cc***

Explanation

The load utility found the input data provided for a field to be incorrect. The corresponding input data set record 'n' will be placed in the DISCARDS data set.

If the NOSUBS keyword was specified, it is possible that the record was discarded because the input contained a code point that when converted from the source CCSID to the target CCSID resulted in a substitution character being placed in the target string.

The error code, *cc*, identifies the problem. See DSNU334I for the list of error codes and their meaning.

System action

The input data set record is noted and is discarded in the DISCARD phase. The LOAD utility continues to process additional records in the input data set.

User response

Following the completion of the current LOAD utility invocation, examine the record in the DISCARDS data set. Correct the error in the discarded input data. Submit a RESUME(YES) LOAD invocation with the DISCARDS data set as the input data set.

Severity

4 (warning)

Related reference

Syntax and options of the LOAD control statement (Db2 Utilities)

Related information

DSNU334I
csect-name INPUT FIELD *field-name* INVALID FOR *table-name*, ERROR CODE *error-code*

DSNU311I ***csect-name* RECORD '*n*' WILL BE DISCARDED DUE TO INVALID *field-name* COLUMN SPECIFICATION**

Explanation

The load utility calculated the location of an input data value using the field specifications supplied and VARCHAR length fields present within the input data set record. The calculated position for the field was determined to be incorrect.

System action

The input data set record number is noted and will be discarded in the DISCARD phase. The LOAD utility continues to process additional records in the input data set.

User response

Following the completion of the current LOAD utility invocation, examine the record in the DISCARDS data set. Correct the error in the discarded input data, if one exists. Otherwise, correct the input field specification. Submit a RESUME(YES) LOAD invocation, which uses the DISCARDS data set and the verified LOAD utility statement and field specifications.

Severity

4 (warning)

Related reference

Syntax and options of the LOAD control statement (Db2 Utilities)

DSNU312I ***csect-name* RECORD '*n*' WILL BE DISCARDED DUE TO ERROR = X'*reason-code*' FROM EXIT ROUTINE *procedure-name* FOR *table-name***

Explanation

The exit routine provided by your installation blocked the load of record 'n' into the table indicated. The reason-code was set by the exit routine.

System action

The input data set record number is noted and will be discarded in the DISCARD phase. error is placed in the DISCARDS data set. The LOAD utility continues to process additional records in the input data set.

System programmer response

Verify that the validation routine is correct.

User response

Following the completion of the current LOAD utility invocation, examine the record in the DISCARDS data set. Correct the error in the discarded input data, if one exists. Ensure that the exit routine provided is correct. Submit a RESUME(YES) LOAD invocation, which uses the DISCARDS data set and the verified LOAD utility statement and field specifications.

Severity

4 (warning)

Related reference

Syntax and options of the LOAD control statement (Db2 Utilities)

DSNU313I ***csect-name* RECORD '*n*' WILL BE DISCARDED DUE TO PART OR HIGH KEY VALUE SPECIFICATION(S)**

Explanation

The discarded record does not belong to any of the partitions being loaded. For a LARGE table space, this might be because the key is higher than the high key value specified for the last partition.

System action

The input data set record number is noted and will be discarded in the DISCARD phase. The LOAD utility continues to process additional records in the input data set.

System programmer response

Verify that the validation routine is correct.

User response

Following the completion of the current LOAD utility invocation, examine the record in the DISCARDS data set. Correct the error in the discarded input data, if one exists. Submit a RESUME(YES) LOAD invocation with the DISCARDS data set as the input data set.

Severity

4 (warning)

Related reference

LOAD (Db2 Utilities)

Syntax and options of the LOAD control statement (Db2 Utilities)

DSNU314I *csect-name* RECORD 'n' WILL BE DISCARDED DUE TO WHEN SPECIFICATION(S)

Explanation

The discarded record satisfies none of the WHEN selection expressions provided.

System action

The input data set record is noted and will be discarded in the DISCARD phase. The LOAD utility continues to process additional records in the input data set.

User response

Following the completion of the current LOAD utility invocation, examine the record in the DISCARDS data set. Correct the error in the discarded input data, if one exists. Submit a RESUME(YES) LOAD invocation with the DISCARDS data set as the input data set. If FORMAT UNLOAD was specified on the load statement, the WHEN specifications are built internally. This specification ensures that the rows are loaded back into the exact same tables from which the data was unloaded.

Severity

4 (warning)

Related reference

Syntax and options of the LOAD control statement (Db2 Utilities)

DSNU315I *csect-name* RECORD '*n*' WILL BE DISCARDED DUE TO UNEXPECTED ERROR

Explanation

The LOAD of input data set record number *n*was attempted but was not successful due to an unexpected error.

System action

If the error was caused because a resource was not available, a DSNT500I message will be issued.

The utility step will be abended with a system X'04E' and an abend reason code of '00E40318'. If a DSNT500I message is not issued, an SVC dump will be requested. A SYSABEND dump of batch storage is also requested.

Operator response

An operator with SYSOPR authority can issue a TERM UTIL to free any held resources if that is necessary.

System programmer response

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

User response

If a DSNT500I message was issued, refer to the description under that message number. If the unavailable resource becomes available, the utility step is restartable.

If there is no DSNT500I message, the error is an unexpected internal error and you should consult your system programmer.

Severity

8 (error)

Related reference

-TERM UTILITY (Db2) (Db2 Commands)

Related information

DSNT500I

csect-name RESOURCE UNAVAILABLE REASON *reason-code* TYPE *resource-type* NAME *resource-name*

00E40318 (Db2 Codes)

DSNU316I ***csect-name* - UNABLE TO DRAIN WRITERS FROM *object-type object-name* PART *part-num***

Explanation

The utility was unable to drain the class of writers from a partition of an object because the resource was unavailable. The partition is identified by object type (object-type), object name (object-name), and partition number (part-num). Message DSNT500I tells why the resource was unavailable.

System action

Utility processing terminates.

Problem determination

Refer to message DSNT500I.

Severity

8 (error)

DSNU317I ***csect-name* DISCARD LIMIT HAS BEEN REACHED**

Explanation

The DISCARDS limit specified on the LOAD utility statement was reached.

System action

Processing abends to allow users to increase the discard limit and restart the utility.

User response

Increase the discard limit and restart the utility. Otherwise -TERM the utility. Review the file of input records provided to LOAD and review table definitions to determine why the number of records discarded exceeds expectations.

Problem determination

See user response.

Severity

8 (error)

DSNU318I ***csect-name* RECORD '*n*' WILL BE DISCARDED DUE TO INVALID *field-name* COLUMN SPECIFICATION FOR *table-name***

Explanation

The load utility calculated the location of an input data value using the field specifications supplied and VARCHAR length fields present within the input data set record 'n'. The calculated position for the field was determined to be incorrect.

System action

The input data set record number is noted and will be discarded in the DISCARD phase. The LOAD utility continues to process additional records in the input data set.

User response

Following the completion of the current LOAD utility invocation, examine the record in the DISCARDS data set. Correct the error in the discarded input data, if one exists. Otherwise, correct the input field specification. Submit a RESUME(YES) LOAD invocation, which uses the DISCARDS data set and the verified LOAD utility statement and field specifications.

Severity

4 (warning)

Related reference

Syntax and options of the LOAD control statement (Db2 Utilities)

DSNU319I ***csect-name* RESUME(YES) WAS SPECIFIED FOR EMPTY PARTITION *nn*. RESUME(NO) IS ASSUMED**

Explanation

This message is issued in response to a LOAD utility request containing a partition level RESUME(YES) option. The RESUME(YES) option implies that the specified partition 'nn' is populated, but in this case it was not. The message alerts the invoker to this fact, and continues as if RESUME(YES) was not specified.

System action

The LOAD utility, in attempting to honor the RESUME(YES), found the partition was empty, ignored

the option, and continued as if RESUME(NO) was specified.

User response

The user is alerted to the fact that the requested partition was empty rather than populated as the RESUME LOAD option implied.

Severity

4 (warning)

DSNU320I ***csect-name*** **RESUME(YES) WAS SPECIFIED FOR AN EMPTY TABLESPACE**

Explanation

RESUME(YES) was specified within the LOAD utility statement. However, the RESUME(YES) option implies that the specified table space is populated.

System action

Processing continues. The LOAD utility, in attempting to honor the RESUME(YES), found the table space empty, so ignored the option, and proceeded as if RESUME(NO) was specified. If this table is currently defined as COMPRESS YES, a dictionary is not built, unless the tablespace is empty, in which case a compression dictionary will be built.

User response

The user is alerted to the fact that the requested table space was empty rather than populated as the RESUME LOAD option implied. Use the RESUME(NO) option if you want a compression dictionary built.

Severity

4 (warning)

DSNU321I ***csect-name*** **CHECK PENDING ON TABLESPACE** ***tablespace-name*** **PROHIBITS PROCESSING**

Explanation

The requested utility cannot be run against a tablespace or tablespace partition in a check pending state.

System action

Processing terminates after the check pending states of all target tablespaces or partitions of the utility are analyzed.

User response

Remove the named tablespace or partition from its check pending state by using the CHECK DATA or REPAIR utility. If you want more information on the extent of questionable data in the table space, query the SYSTABLES and SYSTABLEPART catalog tables.

Severity

8 (error)

DSNU322I ***csect-name*** **DEFERRED STATUS OF TABLE SPACE** ***database-name.table-space-name*** **PROHIBITS PROCESSING**

Explanation

The requested utility cannot be run against a table space or table space partition in a deferred state.

System action

Processing terminates after the deferred state of all target table spaces or table space partitions of the utility are analyzed.

User response

To remove the deferred state, use the RECOVER TABLESPACE, LOAD REPLACE utility, or -START DATABASE command with ACCESS(RW) or ACCESS(RO). If you want more information on the status of the table space, use the -DISPLAY DATABASE command.

Severity

8 (error)

DSNU323I ***csect-name*** **COLUMN** ***ccc*** **IS OMITTED**

Explanation

The column 'ccc' is a nonnullable column and is not being loaded. Field specifications must include all nonnullable columns. The identified column name was missing from the field specification.

System action

Further utility processing is terminated.

System programmer response

Corrective procedures may require that a table be dropped and created again.

User response

Determine if the input data contains the nonnullable column as a field. If it does, change the field specification to include it. If the input data does not contain the nonnullable column as a field, determine which is in error, the input data or the column specification. Make the corresponding correction. Resubmit the job if that is still appropriate.

Severity

8 (error)

Related tasks

Changing data types by dropping and re-creating the table (Db2 Administration Guide)

Related reference

Syntax and options of the LOAD control statement (Db2 Utilities)

DSNU324I ***csect-name*** **DEFERRED STATUS OF INDEX SPACE** ***creator-name.index-name*** **PROHIBITS PROCESSING**

Explanation

The requested utility cannot be run against an index space or index space partition in a deferred state.

System action

Processing terminates after the deferred state of all target index spaces or index partitions of the utility are analyzed.

User response

The deferred state can be removed through recovery or rebuild of the index space or the physical index partition. It can also be removed by the -START DATABASE command with ACCESS(RW) or ACCESS(RO). The RECOVER or REBUILD INDEX utility can be run at either the index space or index partition level. If more information on the status of the index space is required, use the -DISPLAY DATABASE command.

Severity

8 (error)

DSNU325I ***csect-name*** **- AN INVALID SQL/DS FORMAT RECORD WAS ENCOUNTERED**

Explanation

The LOAD utility detected an invalid SQL/DS format record type.

System action

Utility execution is terminated.

User response

Correct the input data and resubmit the job. Data that has been transmitted from an SQL/DS unload disk data set in a VM/370 system may have extra block descriptors and record descriptors at the beginning of each record. Ensure that this situation does not exist.

Severity

8 (error)

Related concepts

What to do about utilities that were in progress at time of failure (Db2 Administration Guide)

Restart of LOAD (Db2 Utilities)

Related reference

LOAD (Db2 Utilities)

Syntax and options of the LOAD control statement (Db2 Utilities)

DSNU326I ***csect-name*** **- USER NOT AUTHORIZED FOR LOAD REPLACE ON TABLESPACE**

Explanation

The user attempted to use the REPLACE option of LOAD, and it will reset to empty all tables in the table space before loading data. This option requires load authorization on each table in the table space, but the user did not have authority for one or more tables. In addition, if a table in the table space has a security label column, the user must have the write-down privilege when write-down is in effect.

System action

When LOAD REPLACE validation encounters the first non-authorized table in the table space, the job step is terminated.

User response

Obtaining the LOAD on DATABASE privilege for the database will allow you to proceed using the REPLACE option. If the table space is an implicit database, then obtain the appropriate authorization privileges on the implicit database or DSNDB04. If a table in the table space has a security label column, ensure that the user has write-down privilege when write-down is in effect before using the REPLACE option. The other alternative is to first delete all rows from the tables which are to be loaded, and then use the RESUME option instead of the REPLACE option.

Severity

12 (severe error)

DSNU327I ***csect-name*** **TABLE** ***b*** **IS NOT IN SAME TABLESPACE AS TABLE** ***a***

Explanation

All tables that are the subject of a single LOAD utility statement must belong to the same table space.

System action

Further utility processing is terminated.

User response

Remove the INTO TABLE control statement that specifies TABLE 'b' from the current LOAD request. If the data is to be loaded into TABLE 'b', create another LOAD utility statement that contains the INTO TABLE control statement for TABLE 'b' and resubmit the job.

Severity

8 (error)

DSNU328I ***csect-name*** **CANNOT PROCESS THE NON-EMPTY PARTITION** ***nn*** **WITH RESUME(NO). PROCESSING TERMINATES**

Explanation

The partition level RESUME keyword either specified or defaulted to a value of NO, which requires the partition to be empty. However, the LOAD command named partition 'nn', which was not empty.

System action

Further utility processing is terminated.

System programmer response

Determine whether the partition should be empty. If it should, use SQL DELETE to empty it. Otherwise, instruct the user to use the RESUME(YES) option for that partition.

User response

Determine why the assumption of an empty partition was wrong. This may require consultation with the system programmer. Either remove the current partition's rows using an SQL DELETE, or change the LOAD option to RESUME YES. Resubmit the job.

Severity

8 (error)

Related reference

Syntax and options of the LOAD control statement (Db2 Utilities)

DSNU329I ***csect-name*** **- FIELD** ***field-name*** **IS NOT DEFAULTABLE**

Explanation

You specified a NULLIF or DEFAULTIF field specification option for:

- A column defined to be not nullable or not defaultable
- A field with no column counterpart.

System action

The utility abends to allow restart.

User response

Determine whether the field specification refers to the correct column. If it does, remove the NULLIF option from the field specification, and restart the job. Alternatively, TERM the utility.

Severity

8 (error)

Related reference

Syntax and options of the LOAD control statement (Db2 Utilities)

-TERM UTILITY (Db2) (Db2 Commands)

DSNU330I ***csect-name*** **TABLESPACE IS NOT EMPTY**

Explanation

The RESUME keyword either specified or defaulted to a value of 'NO', which requires an empty table space. However, the LOAD command named a table space that was not empty.

System action

Further utility processing is terminated.

System programmer response

If the table space is used by more than one application, determine whether the table space should be empty. If it should be, use SQL DELETE to make it empty. Otherwise, instruct the user to use the RESUME(YES) option.

User response

Determine why the assumption of an empty table space was wrong. This may require consultation with the system programmer. Either remove the current table(s) rows using an SQL DELETE, or change the LOAD option to RESUME YES. Resubmit the job.

Severity

8 (error)

Related reference

Syntax and options of the LOAD control statement (Db2 Utilities)

DELETE (Db2 SQL)

DSNU331I ***csect-name*** **FIELD LISTS ARE NOT ALLOWED WITH** ***keyword*** **KEYWORD**

Explanation

Field lists are not allowed with FORMAT UNLOAD or FORMAT SQL/DS keywords.

System action

Further utility processing is terminated.

User response

Determine whether the field specifications, the FORMAT, or INCURSOR option is correct. Eliminate whichever is incorrect and resubmit the job.

Severity

8 (error)

Related reference

Syntax and options of the LOAD control statement (Db2 Utilities)

DSNU332I ***csect-name*** **- INPUT VALUE X'*hex-data*' OUT OF RANGE FOR COLUMN '*column-name*'**

Explanation

The LOAD utility detected a numeric value outside of the range of permissible values for the column in the Db2 table.

csect-name
The name of the control section that issued the message.

hex-data
The input value that is outside of the range of the column.

column-name
The name of the column.

A loss of significant digits results if the LOAD process continues. The input data type is SMALL INTEGER, INTEGER, DECIMAL, or FLOAT and is displayed in hexadecimal.

System action

Further utility processing is terminated unless DISCARD processing is active.

User response

Correct the input data and resubmit the job. Make sure that the 'field specification' on the LOAD statement is consistent with the table definition and the input data. This might mean changing any of the following items:

- The table definition
- The LOAD statement
- The input data.

Severity

8 (error)

Related concepts

Numbers (Db2 SQL)

Related tasks

Restarting an online utility (Db2 Utilities)

Related reference

LOAD (Db2 Utilities)

DSNU333I ***csect-name*** **- INPUT VALUE '*ebcdic-data*' OUT OF RANGE FOR COLUMN '*column-name*'**

Explanation

The LOAD utility detected a numeric value outside the range of permissible values for the column in the Db2 table. A loss of significant digits results if the LOAD process continues. The input data type is INTEGER EXTERNAL, DECIMAL EXTERNAL, or FLOAT EXTERNAL.

System action

Further utility processing is terminated.

User response

Correct the input data and resubmit the job. Make sure that the 'field specification' on the LOAD statement is consistent with the table definition and the input data. This might mean changing:

- The table definition

- The LOAD statement
- The input data.

Severity

8 (error)

Related tasks

Restarting an online utility (Db2 Utilities)

Related reference

LOAD (Db2 Utilities)

DSNU334I ***csect-name*** **INPUT FIELD** ***field-name*** **INVALID FOR** ***table-name*****, ERROR CODE** ***error-code***

Explanation

The LOAD utility found incorrect input data.

csect-name
The name of the control section that issued the message.

field-name
The name of the field for which incorrect data was provided.

table-name
The name of the table.

error-code
Description of the problem. Possible error codes are:

01
Input numeric value is out of the range for the table column.

02
Input numeric field contains invalid numeric data.

03
An error occurred when converting input numeric data to floating-point data.

04
Input packed decimal data is in error.

05
Input is too long for a date column.

06
Input is too short for a date column.

07
Input is too long for a time column.

08
Input is too short for a time column.

09
Input is too long for a timestamp column.

10
Input is too short for a timestamp column.

11
Input character field is too long for the table column.

12
Input variable character field is too long for the table column.

13
Input is out of range for the date/time column.

14
Input is invalid for the date/time column.

15
Input length is incorrect for numeric column.

16
Input contains a blank character.

17
Input is too long for a graphic column.

18
Input is invalid for a graphic column.

19
Input is too long for the table column after a required CCSID conversion.

20
Input contained an invalid code point for a required CCSID conversion.

21
Input does not conform to the rules for valid data for a required CCSID conversion.

22
Input causes an error during CCSID conversion. An example of this type of error would be an error in a user exit routine.

23
Input is invalid for a ROWID column.

24
Input contained a code point that when translated from the source CCSID to the target CCSID resulted in a substitution character in the target string. This condition can occur when the NOSUBS keyword was specified and no discard data set was specified.

25
The range of values for an identity column is exhausted.

26
A null value was supplied for a not null column.

27
Input is invalid for a security label column.

28
Input is a valid security label, but the SECLABEL and the user's SECLABEL are disjoint. The user does not have the authority to load this SECLABEL.

29
Decimal floating point conversion error.

31
XML is not well formed.

34
The FORMAT INTERNAL option is specified, but the actual record length does not match the record length in the record header. This mismatch indicates that the input data is invalid.

System action

Further utility processing is terminated.

User response

Make sure that the field specification on the LOAD statement is consistent with the table definition and the input data. Correct one or more of the following items and resubmit the job:

- The table definition
- The LOAD statement
- The input data

Severity

8 (error)

Related reference
LOAD (Db2 Utilities)

DSNU335I ***csect-name*** **INPUT FIELD 'ffffffff' NOT ENTIRELY WITHIN INPUT RECORD**

Explanation

The LOAD utility found that the input field 'ffffffff' extends beyond the end of the input record.

If DISCARDS processing is active, the message severity is 4 (warning).

System action

For fixed length records, with no VARCHARs included, the length needed by the LOAD utility can be calculated before processing. In this case, when the LOAD utility determines that no records can be loaded because ALL of the INTO TABLE statements require input longer than the defined lengths, the LOAD job terminates on the first record without discarding any records. Further utility processing with mixed or non-fixed length records is terminated unless DISCARDS processing is active.

User response

Correct the input data and resubmit the job. Make sure that the 'field specification' on the LOAD statement is consistent with the table definition and the input data. This might mean changing:

- The table definition
- The LOAD statement
- The input data.

Severity

4 (warning) or 8 (error)

Related tasks
Restarting an online utility (Db2 Utilities)
Related reference
LOAD (Db2 Utilities)

DSNU336I ***csect-name*** **INVALID** ***nullif*** **SPECIFICATION FOR INPUT FIELD** ***ffffffff***

Explanation

The LOAD utility found the NULLIF field specification to be incorrect.

System action

Further utility processing is terminated.

User response

Correct the NULLIF field specification and resubmit the job.

Severity

8 (error)

Related concepts
Restart of LOAD (Db2 Utilities)
Related reference
Syntax and options of the LOAD control statement (Db2 Utilities)

DSNU337I ***csect-name*** **RECORD(n), CONCATENATED CONTINUEIF RECORD IS TOO LARGE**

Explanation

The CONTINUEIF option was specified during LOAD to concatenate multiple physical records into one logical record for loading. The resultant concatenated record is too large to be processed. The maximum length allowed is 32767 bytes.

System action

When discard processing is specified, the input data set logical record is noted and will be discarded in the DISCARD phase. The LOAD utility continues to process additional records in the input data set, and the severity level is 4. When discard process is not specified, the severity is 8 and the LOAD utility will terminate.

System programmer response

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

User response

When discard processing is specified, following the completion of the current LOAD utility invocation, examine the record in the DISCARDS data set. Correct the error in the discarded input data, and submit a RESUME(YES) LOAD invocation with the DISCARDS data set as the input data set. When discard processing is not specified: correct the error in the input data set and rerun the job.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

Severity

8

DSNU338I ***csect-name*** **INVALID COLUMN SPECIFICATION FOR** ***column name***

Explanation

The LOAD utility found the dynamically determined column location for an input field to be incorrect.

System action

The utility abends to allow restart.

User response

Correct the input field specification or the input data and restart the job. Alternatively, TERM the utility.

Severity

8 (error)

DSNU339I ***csect-name*** **INVALID CONTINUEIF SPECIFICATION**

Explanation

The CONTINUEIF clause of a LOAD utility extends beyond the end of the input record.

System action

The LOAD utility is terminated.

User response

Correct the CONTINUEIF clause. The column specification must be reduced and/or the value being compared must be shortened. The value being compared must be entirely within the input record.

Severity

8 (error)

DSNU340I ***csect-name*** **- ERROR LOADING INDEX, DUPLICATE KEY, INDEX=*index-name*, TABLE=*table-name*, RID OF INDEXED ROW=*indexed-row*, RID OF NON-INDEXED ROW=*nonindexed-row***

Explanation

A duplicate key was found during the BUILD phase of REORG INDEX or REBUILD INDEX, or a duplicate hash key was found during the BUILD phase of REORG INDEX. The duplicate key violates the uniqueness rule for the index or the hash key.

csect-name
The name of the control section that issued the message.

index-name
The name of the index.

table-name
The name of the table.

indexed-row
The record ID (RID) of the indexed row.

nonindexed-row
The record ID (RID) of the non-indexed row.

System action

All duplicate index entries of the indicated index are reported and the index is placed in RECOVERY PENDING status. Duplicate rows are present in the indexed table.

Utility processing continues with any other utility functions within the utility job step.

Operator response

Notify the system programmer.

System programmer response

Take steps to inhibit any further processing until the index is repaired. Applications that are dependent upon the uniqueness of the table rows should not be initiated until corrective action has been taken.

If the nonunique keys are correct, drop and re-create the index as nonunique.

If the records with duplicate keys should not be in the table, use the REPAIR utility with the DELETE option to remove the incorrect rows. Use the RID values provided in the message as input to the REPAIR utility.

After the duplicate data rows are removed or the unique index has been dropped, issue the DISPLAY DATABASE command with the RESTRICT option against the target database. Use the REBUILD INDEX utility to recover any indexes that are in the REBUILD pending state. Optionally, use the CHECK INDEX utility to verify that the data and indexes are consistent.

User response

Notify the system programmer.

Problem determination

Use the REPAIR utility with LOCATE RID and DUMP statements to view the records with duplicate keys.

The inconsistent index can cause SQLSELECT to fail. Use CHECK INDEX to check the validity of the index.

Severity

8 (error)

Related reference

-DISPLAY DATABASE (Db2) (Db2 Commands)
CHECK INDEX (Db2 Utilities)
REORG INDEX (Db2 Utilities)
REPAIR (Db2 Utilities)

DSNU341I ***csect-name*** **- IMAGE COPY MUST BE TAKEN BEFORE REORG CAN BE RUN ON A DB2 CATALOG OR DIRECTORY TABLE SPACE:** ***database-name.tablespace-name***

Explanation

The Db2 catalog or directory table space being reorganized does not have an image copy that the RECOVER utility can use to recover the table space to currency. Before running the REORG utility, you must run the COPY utility to create an image copy for the indicated table space. This action prevents having to recover the Db2 catalog or directory table space to a prior point in time if a problem occurs during REORG processing.

csect-name
The name of the control section that issued the message.

database-name
The name of the directory or catalog database.

tablespace-name
The name of the directory or catalog table space.

System action

Processing terminates.

User response

Run the COPY utility to create an image copy of the Db2 catalog or directory table space. If more than one catalog or directory table space is to be reorganized, consider using the QUIESCE and COPY utilities for the set of table spaces to be reorganized.

Use the REPORT utility to view the recovery information related to the table space. The output from the REPORT utility should indicate either the absence of an image copy, or the presence of a REORG LOG NO SYSCOPY record.

Severity

8 (error)

Related reference

COPY (Db2 Utilities)
QUIESCE (Db2 Utilities)
REPORT (Db2 Utilities)

DSNU342I ***csect-name*** **ERROR LOADING INDEX, ERROR = X*reason-code*, INDEX =** ***index-name***

Explanation

The LOAD, REORG or REBUILD INDEX utility encountered a processing error, which it could not correct, while extending the index identified by *index-name*.

System action

The building of index entries for the indicated index is not completed. An SVC dump of the database services address space is requested for diagnostic purposes. The extension of other indexes associated with the tables being loaded is attempted. Any subsequent attempt to use the index directly or indirectly will cause the invoker to abend.

Operator response

The table space in question might need to be stopped and started for utility-only processing to inhibit attempted application use of the defective index.

System programmer response

If the index is used by more than one application, applications that either insert rows into, or delete rows from, the indexed table or use the index to access rows must be inhibited from executing. One way to accomplish this is to place the table space in question under utility-only processing control by using the START DATABASE and STOP DATABASE commands until the REBUILD INDEX utility is executed.

Alternatively, the index can be dropped. Application execution can then proceed, and the index can be created again (unless the index was the partitioning index).

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

User response

If the indexed table is used by more than one application, the system programmer should be informed so that applications that insert rows into, or delete rows from, the table or use the index directly are inhibited until corrective action is taken.

Normal corrective action would be to use the REBUILD INDEX utility option to reconstruct the index after the processing problem identified by the reason code has been resolved. Alternatively, the index can be dropped and then created again, unless the index in question is the partitioning index.

Severity

8 (error)

Related concepts

Db2 reason codes (Db2 Codes)

Related reference

REBUILD INDEX (Db2 Utilities)

LOAD (Db2 Utilities)

REORG INDEX (Db2 Utilities)

REORG TABLESPACE (Db2 Utilities)

DSNU343I ***csect-name*** **- BUILD PHASE STATISTICS.** ***nnn*** **DUPLICATE KEY ERRORS ENCOUNTERED**

Explanation

The count of duplicate key errors encountered during processing is 'nnn'.

System action

Processing continues. For the LOAD utility, the records causing the duplicate key errors will be deleted in a subsequent phase.

Severity

4 (warning) or 8 (error)

DSNU344I ***csect-name*** **- UNIQUE INDEX KEY DUPLICATES KEY OF INDEXED ROW AT RID** ***record-id*** **INDEX =** ***index-name*** **TABLE =** ***table-name*** **RECNO =** ***record-number*** **RID =** ***duplicate-id***

Explanation

The indicated input data set record was loaded into a table, but it duplicates the key value of an existing record or a hash key, which causes a unique index violation

csect-name
The name of the control section that issued the message.

record-id
The record ID where the input data set was loaded.

index-name
The name of the index.

table-name
The name of the table.

record-number
The number for the record in the input data set to load.

duplicate-id
The record ID of the duplicate key value.

System action

Processing continues.

No index entry is created for the record at RID *duplicate-id*. The record will be deleted in a subsequent phase of processing.

Severity

4 (warning)

DSNU345I ***csect-name*** **UNIQUE INDEX KEY DUPLICATES KEY FROM INPUT DATASET RECORD** ***iiii*** **LOADED AT RID** ***rrrr*** **INDEX =** ***index-name*** **TABLE =** ***table-name*** **RECNO =** ***recno*** **RID =** ***duprid***

Explanation

Input data set record *recno* was loaded into table *table-name* at RID *duprid*, but it causes a unique index violation for index *index-name*. It duplicates the key value of another record in the load job: the record loaded at RID *rrrr* from input data set record *iiii*.

System action

Processing continues. Index entries are not created for either record. Both records will be deleted in a subsequent phase of processing.

Severity

4 (warning)

DSNU346I **csect-name RECORD(n), CONCATENATED SQL/DS RECORD IS TOO LARGE**

Explanation

A LOAD utility was executing with FORMAT SQL/DS input data. Multiple spanned segments of the input data were concatenated into one logical record for loading. The resultant concatenated record is too large to be processed. The maximum length allowed is 32764 bytes.

System action

When discard processing is specified, the input data set logical record is noted and is discarded in the DISCARD phase. The LOAD utility continues to process additional records in the input data set and the severity is 4. When discard processing is not specified, the severity is 8 and the LOAD utility terminates.

System programmer response

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

User response

When discard processing is specified, examine the records in the DISCARDS data set after the LOAD utility completes. Correct the error in the discarded input data. Then run the LOAD utility with the RESUME YES option using the DISCARDS data set as input. When discard processing is not specified, correct the error in the input data set and rerun the job.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

Severity

4 or 8

DSNU347I ***csect-name*** **DEADLINE =** ***yyyy-mm-dd-hh.mm.ss.mmmmmm***

Explanation

This message is displayed in one of the following circumstances:

- As part of the output from the DISPLAY UTILITY command
- When the REORG INDEX or REORG TABLESPACE utility estimates that the SWITCH phase will not start by the deadline that is specified in the DEADLINE option

In either case, this message is described as part of the DISPLAY UTILITY output in "DSNU100I" on page 633.

DSNU348I ***csect-name*** **BUILD PHASE STATISTICS. NUMBER OF KEYS =** ***nnnnnnnn*** **FOR INDEX** ***index-name*** **PART** ***part-num***

Explanation

This message is issued by the BUILD phase of the REBUILD INDEX utility to report the total number of index key entries used to build the indicated index partition.

System action

This message indicates the number of index key entries submitted to the Db2 data manager to build the indicated index partition. Both unique and nonunique key entries are counted. Rejected key entries are not counted.

User response

The user can verify that the number reported is consistent with expectations.

Severity

0 (informational)

DSNU349I ***csect-name*** **BUILD PHASE STATISTICS. NUMBER OF KEYS =** ***nnnnnnnn*** **FOR** ***index-name***

Explanation

This message is issued by the BUILD phase of the LOAD, REORG or REBUILD INDEX utility. The message is repeated for each index built by the LOAD, REORG or REBUILD INDEX utility. It indicates the total number of index key entries used to build the indicated index.

System action

This message indicates the number of index key entries that were submitted to the Db2 data manager to build the indicated index. Both unique and nonunique key entries are counted. Rejected key entries are not counted.

User response

The user can verify that the number reported is consistent with expectations. For example, the user can determine if it matches the number of records loaded for the table indexed by the indicated index.

Severity

0 (informational)

DSNU350I ***csect-name*** **- EXISTING RECORDS DELETED FROM TABLESPACE**

Explanation

A LOAD utility execution, in which REPLACE was specified, has deleted all records from the specified table space.

System action

Processing continues.

Severity

0 (informational)

DSNU351I ***csect-name*** **- '*reorg-option*' OPTION IS NOT APPLICABLE FOR A DB2 CATALOG OR DIRECTORY OBJECT. THE OPTION IS IGNORED.**

Explanation

The identified option does not apply for this Db2 catalog or directory object. Table spaces and indexes within the Db2 catalog and directory may be processed differently than other table spaces and indexes. Consequently, these table spaces and indexes may not make use of reorg option *reorg-option*.

System action

The option is ignored and processing continues.

User response

None is required. However, you can remove the option from the utility input statement.

Severity

4 (warning)

DSNU352I **EXISTING RECORDS DELETED FROM TABLESPACE PARTITION x**

Explanation

A LOAD utility execution, in which PART 'x' REPLACE was specified, has deleted all data records from partition 'x'. Index records over partition 'x' will be deleted in a subsequent phase of processing.

System action

Processing continues.

Severity

0 (informational)

DSNU353I ***csect-name*** **RECORD '*n*' WILL BE DISCARDED DUE TO CHECK CONSTRAINT** ***constraint-name*** **VIOLATION ON TABLE** ***table-name***

Explanation

The discarded record violates the check constraint named *constraint-name* defined on table *table-name*.

The record is not loaded and is discarded during the DISCARD phase.

System action

The LOAD utility continues to process additional records in the input data set.

User response

After the LOAD utility completes, examine the record in the DISCARDS data set. Correct the error in the discarded input data. Submit a RESUME(YES) LOAD job with the DISCARDS data set as the input data set.

Severity

4 (warning)

DSNU354I ***csect-name*** **RECORD '*n*' VIOLATES CHECK CONSTRAINT *constraint-name* ON TABLE *table-name***

Explanation

The LOAD utility cannot load record *n* into table *table-name* because the check constraint *constraint-name* would be violated. The record is not loaded.

System action

Processing terminates. An abend is requested so that the LOAD can be restarted after the error condition is corrected.

User response

Find the failing record in the input data set, correct the condition that caused the check constraint to be violated, and restart the LOAD utility. You can optionally include a SYSDISC DD statement in the JCL input to hold copies of records that are not loaded.

Severity

8 (error)

DSNU355I ***csect-name*** **INDEXVAL PHASE STATISTICS -** ***error-count*** **DUPLICATE KEY ERRORS, KEY EVALUATION ERRORS, XML ERRORS OR LOB ERRORS WERE CORRECTED BY DELETING** ***deleted-count*** **DATA ROWS**

Explanation

This message reports the results of the INDEXVAL phase of the LOAD utility. Data rows that were added during the LOAD or RELOAD phase of this LOAD utility invocation were deleted because the data rows caused one of the following conditions:

- Unique index violations in the BUILD phase
- Key evaluation errors during the build of an index on an expression-based index
- XML document errors or LOB errors in the BUILD phase

csect-name
The name of the control section that issued the message.

error-count
The number of unique index violations or key evaluation errors.

deleted-count
The number of data rows that were deleted to correct the errors.

Unique index violations are counted in one of two ways. An input data set record which has a value for a uniquely indexed column that duplicates a value that existed in the index prior to the LOAD job is counted as one duplicate key error. Two input data set records which have like values for a uniquely indexed column are counted as two unique index errors (that is, each of the two input data set records is in error).

System action

Processing continues.

System programmer response

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

User response

Examine the error summary from the LOAD job. Determine which of the discarded records need to be corrected and loaded into the table space.

Compare the number of duplicate key errors or key evaluation errors that were corrected in the INDEXVAL phase to the number of duplicate key errors that were detected in the BUILD phase (reported by message DSNU343I).

If the counts are unequal, notify the system programmer.

If the counts are equal, following the LOAD utility execution, examine the discards file or the LOAD error summary to determine which input data set records caused the unique index violations or key evaluation errors. Revise the input records so they will not introduce duplicate values into unique indexes and

reapply the input records to the table space. Alternatively, if appropriate, make the index non-unique and reapply the rejected records that caused the duplicate key errors to the table space.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

Severity

4 (warning)

Related information

DSNU343I
csect-name - BUILD PHASE STATISTICS. *nnn* DUPLICATE KEY ERRORS ENCOUNTERED

DSNU356I ***csect-name* INDEXVAL PHASE COMPLETE, ELAPSED TIME = *hh/mm/ss***

Explanation

The INDEXVAL phase of the LOAD utility has completed normally. The elapsed time for the execution was 'hh' hours, 'mm' minutes, and 'ss' seconds.

Severity

0 (informational)

DSNU357I ***csect-name* - 'LOG NO' OPTION REQUIRED FOR DB2 CATALOG AND DIRECTORY TABLE SPACES**

Explanation

The LOG NO option must be specified when reorganizing a Db2 catalog or directory table space.

System action

Processing terminates.

User response

Add the LOG NO option to the utility input statement.

Severity

8 (error)

DSNU358I ***csect-name* - 'UNLOAD ONLY' OPTION NOT VALID FOR DB2 CATALOG OR DIRECTORY TABLE SPACE**

Explanation

The UNLOAD ONLY option is not permitted for Db2 catalog or directory table spaces.

System action

Processing terminates.

User response

Determine the purpose for using the UNLOAD ONLY option. There might be alternative ways of accomplishing the required function (for example, the UNLOAD PAUSE option).

Severity

8

DSNU359I **KEYWORD 'SORTKEYS' SPECIFIED BUT NO INDEX OR FOREIGN KEYS EXIST, KEYWORD IS IGNORED**

Explanation

The 'SORTKEYS' keyword was specified for a LOAD or REORG utility job; however, it was found that no index and no foreign keys were defined for any of the tables being loaded or reorganized. The keyword is ignored and processing continues normally.

System action

Processing continues normally.

User response

If an index or foreign keys were expected to be found for the table or tables being loaded or reorganized, determine the reason the index or foreign keys could not be found.

Problem determination

Probably a user error. Determine if an index should be defined on any of the tables in the table space, or if foreign keys should be defined. If so, define the index or foreign keys; otherwise, remove the 'SORTKEYS' keyword from the utility statement if necessary.

Severity

0 (informational)

DSNU360I ***csect-name*** **- IN REORG WITH SHRLEVEL REFERENCE OR CHANGE, DATA SET *name* EXISTS, CONTEXT=*c***

Explanation

For the area (table space or partition) being reorganized, REORG with SHRLEVEL REFERENCE or CHANGE unloads data from the original data sets and reloads data into shadow data sets. REORG then exchanges the names of the original and shadow data sets, using temporary names during the renaming. The original name of a data set is in the form "*catname*.DSNDB*x*.*dbname*.*psname*.I0001.A*nnn*". The shadow name of a data set is in the form "*catname*.DSNDB*x*.*dbname*.*psname*.J0001.A*nnn*". The temporary name of a data set is in the form "*catname*.DSNDB*x*.*dbname*.*psname*.T0001.A*nnn*". REORG uses such data sets for indexes as well as data.

During its initialization, REORG cannot execute if:

- Data sets with the temporary names already exist.
- Db2-managed data sets with the shadow names already exist.
- User-managed data sets with the shadow names do **not** already exist.

To exchange the names of the original and shadow data sets, REORG performs the following renaming:

1
In the switch phase, it renames the original data set from the original name to the temporary name

2
In the switch phase, it renames the shadow data set from the shadow name to the original name

3
In the utilterm phase, it renames the original data set from the temporary name to the shadow name (for user-managed data sets). It deletes the temporary for Db2-managed data sets.

If a -TERM UTILITY command is issued after any renaming, or a restart of the REORG switch phase occurs after any renaming, the data set names revert back to their original form prior to the renaming:

4
The original data set from the shadow name to the temporary name

5
The shadow data set from the original name to the shadow name

6
The original data set from the temporary name to the original name

The context code indicates the specific type of error:

1
During the switch phase of REORG, on rename 1, REORG detected that a data set with a temporary name already exists. This error condition can arise for a Db2-managed or user-managed data set.

2
During the switch phase of REORG, on rename 2, REORG detected that a data set with a original name already exists. This error condition can arise for a Db2-managed or user-managed data set.

3
During the utilterm phase of REORG, on rename 3, REORG detected that a data set with a shadow name already exists. This error condition can arise for a user-managed data set.

4
During switch phase restart or a -TERM UTILITY during the switch phase, on rename 4 (while reverting back to the original name), -TERM UTILITY detected that a data set with a temporary name already exists. This error condition can arise for a Db2-managed or user-managed data set.

5
During switch phase restart or a -TERM UTILITY during the switch phase, on rename 5 (while reverting back to the original name), -TERM UTILITY detected that a data set with a shadow name already exists. This error condition can arise for a Db2-managed or user-managed data set.

6
During switch phase restart or a -TERM UTILITY during the switch phase, on rename 6 (while reverting back to the original name), -TERM UTILITY detected that a data set with a original name already exists. This error condition can arise for a Db2-managed or user-managed data set.

8
During initialization of REORG, REORG detected that a data set with a temporary name already exists. This error condition can arise for a Db2-managed or user-managed data set.

System action

For context code 1, or 2, the utility job step that caused the function to be requested abends with code 00E4031B. The utility job is placed in the stopped state.

For context code 3, the utility job step that caused the function to be requested continues without performing this renaming.

For context code 4, 5, or 6, the object is left in a recovery pending state, -TERM UTILITY continues to

undo renaming, and a message is issued. The objects and messages are as follows:

- If the data set is part of a nonpartitioned table space, the object is the table space, and the message is DSNU562I.
- If the data set is part of a partition of a table space, the object is the partition, and the message is DSNU560I.
- If the data set is part of a nonpartitioned index, the object is the index, and the message is DSNU557I.
- If the data set is part of a partition of a partitioned index, the object is the partition of the index, and the message is DSNU559I.

For context code 8, REORG does not execute.

User response

For context code 1 or 2, you can choose between these actions:

- Delete the data set; then RESTART the utility.
- TERM the utility. Delete the data set before trying to execute REORG again with SHRLEVEL REFERENCE or CHANGE.

For context code 3, if you want to perform the renaming, delete the data set with the shadow name and then perform the renaming.

For context code 4, 5, or 6, execute the RECOVER or REBUILD INDEX utility; then delete the shadow and temporary data sets (if they still exist).

For context code 8, delete the data set and then execute REORG.

Severity

8 (error)

DSNU361I ***csect-name*** **FOREIGN KEY HAS NO PRIMARY KEY FOR RELATIONSHIP=*r1* INPUT RECORD NUMBER=*nnnn*, RID=X*rrrr***

Explanation

Input record *nnnn* caused a row to be loaded into table *table* at RID *rrrr* with no primary key for the relationship with the name *r1*.

System action

Processing continues.

User response

None required. The constraint violation described will be rectified later in processing.

Severity

4 (warning)

DSNU362I ***csect-name*** **- IN *utility* WITH SHRLEVEL CHANGE, LOG HAS BECOME SHORT, BUT MAXRO IS DEFER, MEMBER=*member-name*, UTILID=*utilid***

Explanation

When you execute *utility* with SHRLEVEL CHANGE, Db2 will add a five second pause to the next iteration, if the value of MAXRO is DEFER, and the actual time for an iteration and the estimated time for the next iteration are both less than five seconds. This pause limits the utility's consumption of processor time.

Within an execution of the utility, the first time that this situation occurs, Db2 produces this message, which announces the pause. On all later occurrences of this situation, Db2 still adds the pause, but Db2 sends the message only if Db2 has *not* sent the message (for this execution of the utility) within the past 30 minutes.

WTO
This message is sent to the console, but it is not an action message. It is not sent to SYSPRINT.

member-name
In a data sharing environment, *member-name* identifies the Db2 member. In a non-sharing environment, *member-name* is blank. The variable of *utilid* identifies the utility job step.

System action

The utility continues execution, with a five second pause. If the conditions in the explanation above continue to be true, Db2 continues to add five second pauses.

Operator response

You are not required to take any action at this time, but if you were planning to wait for an appropriate time to execute the -ALTER UTILITY command to increase the value of MAXRO and thus cause the utility to finish, now might be an appropriate time to execute.

User response

You are not required to take any action at this time, but if you were planning to wait for an appropriate

time to execute the -ALTER UTILITY command to choose the value of MAXRO, and thus cause REORG to finish, now might be an appropriate time to execute.

Severity

0 (informational)

DSNU363I ***csect-name*** **- ENFORCE PHASE STATISTICS - RELATIONSHIP** ***r1*** **FOREIGN KEYS CHECKED=*n* CONSTRAINT VIOLATIONS ENCOUNTERED=*m***

Explanation

This message provides statistics for the enforce phase of the load utility. For relationship 'r1', the number of foreign keys checked is 'n'. The number of constraint violations found is 'm'.

System action

Processing continues.

Severity

0 (informational)

DSNU364I ***csect-name*** **PARTITIONS WILL BE LOADED IN PARALLEL, NUMBER OF TASKS =** ***nnnn***

Explanation

The LOAD utility is able to load partitions in parallel.

csect-name
The name of the control section that issued the message.

nnnn
The number of utility tasks that are used to load partitions.

System action

LOAD processing continues in the RELOAD phase.

User response

You can verify that the number of reported tasks is consistent with your expectations. For example, if 4 partitions are to be loaded, you might expect to see the number of tasks as 4.

Severity

0 (informational)

DSNU365I ***csect-name*** **- USER** ***auth-id*** **DOES NOT HAVE AUTHORITY ON REORG MAPPING TABLE**

Explanation

The REORG utility was run with SHRLEVEL CHANGE and a mapping table, but user *auth-id* does not have authority to delete, insert, select, and update in the mapping table specified in the utility statement.

System action

Further utility processing is terminated.

User response

Obtain authorization to delete, insert, select, and update in the mapping table specified in the utility statement.

Severity

8 (error)

DSNU366I ***csect-name*** **- REORG MAPPING TABLE HAS WRONG COLUMNS**

Explanation

A mapping table was specified for a utility job executing REORG with SHRLEVEL CHANGE. However, the table has the wrong set of columns. This message results from any CREATE table parameters that are missing from, added to or different than the CREATE TABLE statement for the mapping table.

System action

REORG does not execute.

User response

Correct the table columns in the mapping table, and run the REORG utility again.

Severity

8 (error)

Related concepts

Mapping table and SHRLEVEL CHANGE

Access with REORG TABLESPACE SHRLEVEL (Db2 Utilities)

Related reference

Syntax and options of the REORG TABLESPACE control statement (Db2 Utilities)

DSNU367I ***csect-name*** **- ENFORCE PHASE STATISTICS - *n* ROWS DELETED FROM TABLE *t***

Explanation

This message reports the results of the ENFORCE phase of the LOAD utility. Data rows added during the RELOAD phase of the LOAD utility have been deleted because they contained foreign keys which did not have a corresponding primary key. A total of *n* data rows were deleted from table *t*.

Primary errors may cascade and remove additional records. The count is the sum of both primary and secondary constraint violations.

System action

Processing continues.

User response

Determine why no primary key exists for the deleted record.

Problem determination

All primary errors are accompanied by a DSNU361I message which identifies the relationship and input record which does not have a primary key value. The report phase will report all secondary errors and indicate the primary error record which caused this record to be deleted.

The relevant parent table can be found by querying the SYSIBM.SYSRELS catalog table. The relevant columns can be found by querying the SYSIBM.SYSFOREIGNKEYS catalog table.

Severity

4 (warning)

DSNU368I ***csect-name*** **- REORG MAPPING TABLE HAS WRONG INDEX**

Explanation

A mapping table was specified for a REORG utility job that specifies SHRLEVEL CHANGE. However, the table contains the wrong index. This message might result from any CREATE INDEX parameters that are missing from, added to, or different from the CREATE INDEX statement in the mapping table. It might also result from the existence of any other indexes on the mapping table.

System action

The REORG utility does not execute.

User response

Create a mapping table with the correct index and no other indexes, and run the REORG utility.

Severity

8 (error)

Related concepts

Before running REORG TABLESPACE (Db2 Utilities)

Access with REORG TABLESPACE SHRLEVEL (Db2 Utilities)

Related reference

Syntax and options of the REORG TABLESPACE control statement (Db2 Utilities)

DSNU369I ***csect-name*** **- ENFORCE PHASE COMPLETE, ELAPSED TIME = *hh/mm/ss***

Explanation

The ENFORCE phase of the LOAD utility has completed normally. The elapsed time for the execution was 'hh' hours, 'mm' minutes, and 'ss' seconds.

Severity

0 (informational)

DSNU370I ***csect-name*** **- THE LOCAL FORMAT OPTION HAS BEEN USED WITH A DATE OR TIME AND NO LOCAL EXIT HAS BEEN INSTALLED.**

Explanation

The Installation Application Programming Defaults Panel indicated that an exit for date or time was supplied, but the exit supplied by Db2 was not replaced.

System action

The statement cannot be executed.

System programmer response

To replace the Db2-supplied exit routine, an SMP USERMOD must be applied. If an SMP USERMOD is undesirable, the replacement module may be linked into a user library either included in the MVS LINKLIST or concatenated to the STEPLIB in the started task JCL for *ssnm*DBM1 (*ssnm* is the subsystem name).

User response

Contact the system programmer about installation of the date or time exit.

Severity

8 (error)

DSNU371I ***csect-name*** **- REORG MAPPING TABLE'S TABLE SPACE MUST BE SEGMENTED**

Explanation

A REORG TABLESPACE utility statement with the SHRLEVEL CHANGE option specified an invalid mapping table. The mapping table must be defined in a segmented table space or a partition-by-growth table space.

csect-name
The name of the control section that issued the message.

System action

The REORG TABLESPACE utility does not execute.

User response

Specify a mapping table that is defined in a segmented table space or a partition-by-growth table space.

Severity

8 (error)

Related concepts

Before running REORG TABLESPACE (Db2 Utilities)

Partition-by-growth table spaces (Db2 Administration Guide)

Segmented (non-UTS) table spaces (deprecated) (Db2 Administration Guide)

Related reference

Syntax and options of the REORG TABLESPACE control statement (Db2 Utilities)

CREATE TABLESPACE (Db2 SQL)

DSNU372I ***csect-name*** **- CANNOT REORGANIZE REORG MAPPING TABLE'S TABLE SPACE**

Explanation

REORG with SHRLEVEL CHANGE specified a mapping table that resides in the table space that is being reorganized. The table space that contains the mapping table must not be the table space that is being reorganized.

System action

REORG does not execute.

User response

Specify a mapping table that is not in the table space that is being reorganized.

Severity

8 (error)

DSNU373I ***csect-name*** **- IN -ALTER UTILITY OR REORG WITH SHRLEVEL REFERENCE OR CHANGE, DEADLINE HAS ALREADY OCCURRED, CONTEXT=*c***

Explanation

If a deadline is specified in the -ALTER UTILITY command or the REORG utility with SHRLEVEL REFERENCE or CHANGE, the deadline cannot occur before the time of execution of the -ALTER UTILITY or REORG that specified the deadline. Context codes are:

1
The error occurred on -ALTER UTILITY.

2
The error occurred on REORG.

System action

-ALTER UTILITY or REORG does not execute.

User response

Execute -ALTER UTILITY or REORG with no deadline or with a deadline that has not already occurred. If you want to terminate an execution of REORG, use the -TERM UTILITY command.

Severity

8 (error)

DSNU374I ***csect-name*** **-** ***utility-name*** **WITH SHRLEVEL REFERENCE OR CHANGE HAS BEEN TERMINATED, REASON=*reason-code***

Explanation

The utility has terminated.

csect-name
The name of the control section that issued the message.

utility-name
The name of the utility.

reason-code
The reason for the message or SQL code, indicated by one of the following values:

1
The utility with SHRLEVEL CHANGE specified LONGLOG TERM, and at the end of an iteration of log processing, the number of log records that the next iteration would process is not sufficiently lower than the number that the previous iterations processed.

2
Db2 estimated that the switch phase of REORG with SHRLEVEL REFERENCE or CHANGE would not start by the deadline specified in the DEADLINE phrase.

3
REORG terminated because the FlashCopy® failed and no inline copy was made.

System action

The utility terminates.

User response

Take the action that corresponds to the *reason-code* value:

1
Attempt a new invocation of the utility later, perhaps when you expect that the application workload is lower or the maximum needed amount of time for applications to have read-only access is longer.

2

- On SHRLEVEL CHANGE, attempt a new invocation of reorganization later, perhaps when you expect to have a longer time available, you expect that the application workload is lower, or you expect that the maximum needed amount of time for applications to have read-only access is longer.
- On SHRLEVEL REFERENCE, attempt a new invocation of reorganization later, perhaps when you expect to have more time available.

3
Correct the problem with FlashCopy and run the utility again.

Severity

8 (error)

DSNU375I ***csect-name*** **DISCARD PHASE STATISTICS -** ***nnn*** **INPUT DATA SET RECORDS DISCARDED**

Explanation

Input data set records were rejected by the LOAD utility for one or several reasons. The rejected records have been placed in a discards data set. The number of records rejected is 'nnn'. Message DSNU399I summarizes the errors causing the records to be rejected.

System action

Processing continues.

User response

Examine the LOAD error summary and decide which of the discarded records, if any, should be corrected and reapplied to the table space.

Severity

4 (warning)

DSNU376I ***csect-name*** **DISCARD PHASE COMPLETE, ELAPSED TIME =** ***hh/mm/ss***

Explanation

The DISCARD phase of the LOAD utility has completed normally. The elapsed time for the execution was 'hh' hours, 'mm' minutes, and 'ss' seconds.

Severity

0 (informational)

DSNU377I ***csect-name*** **- IN** ***utility*** **WITH SHRLEVEL CHANGE, THE LOG IS BECOMING LONG, MEMBER=*member-name*, UTILID=*utilid***

Explanation

During log processing for REORG with SHRLEVEL CHANGE, the number of log records that the next iteration will process is not sufficiently lower than the number that the previous iterations processed. This situation means that during reorganization, the log is not being read quickly enough to catch up to the application writing the log. This is a WTO message; it is

sent to the console, but it is not an action message. It is also sent to SYSPRINT.

During log processing for *utility* with SHRLEVEL CHANGE, the number of log records that the next iteration is to process is not sufficiently lower than the number that the previous iterations processed. When you executed the utility, the log was not read quickly enough to catch up to the application that is writing the log. This is a WTO message; it is sent to the console, but it is does not require any user action. The message is also sent to SYSPRINT.

Db2 refrains from taking the specified action in the LONGLOG phrase if any one of the following events occur for this execution of the utility before the delay expires:

- You issue an -ALTER UTILITY command.
- You issue a -TERM UTILITY command.
- Db2 estimates that the time to perform the next iteration is less than or equal to the time specified in the MAXRO phrase.
- The utility terminates for any reason (including the deadline).

member-name
Identifies the Db2 member in a data sharing environment. It is blank in a non-data-sharing environment.

utilid
Identifies the utility job step.

System action

After a delay (specified by the DELAY phrase of the *utility* or the -ALTER UTILITY command), the REORG utility performs the action specified by the LONGLOG phrase of the REORG utility or the -ALTER UTILITY command.

Operator response

No action is required. However, if the action that is specified by the LONGLOG phrase is not what you wanted, the operator (or a user-written program that is triggered by the message) can take an action.

Severity

4 (warning)

Related reference
-TERM UTILITY (Db2) (Db2 Commands)
-ALTER UTILITY (Db2) (Db2 Commands)

DSNU378I ***csect-name*** **- REORG WITH SHRLEVEL NONE HAS INAPPROPRIATE NOSYSREC KEYWORD, REASON=*reason-code***

Explanation

A REORG TABLESPACE utility control statement with the SHRLEVEL NONE option contains the NOSYSREC option in a context where it is not allowed.

csect-name
The name of the control section that issued the message.

REORG TABLESPACE with SHRLEVEL NONE allows the following combinations of the SORTDATA and NOSYSREC keywords:

- Neither keyword
- SORTDATA alone (without NOSYSREC)
- SORTDATA NOSYSREC
- NOSYSREC alone

System action

REORG TABLESPACE does not execute.

User response

Correct the REORG TABLESPACE utility control statement:

- For reason code 1, remove SORTDATA NO or NOSYSREC.
- For reason code 2, if you want to execute REORG TABLESPACE with SHRLEVEL NONE, remove NOSYSREC, UNLOAD PAUSE, UNLOAD ONLY, or UNLOAD EXTERNAL.

Severity

8 (error)

DSNU379I ***csect-name*** **- ALTER UTILITY, UTILID = *utilid*: SWITCH PHASE IN REORG HAS ALREADY STARTED, NO ALTER IS PERFORMED**

Explanation

The -ALTER UTILITY command was applied to a job that is executing REORG with SHRLEVEL REFERENCE or CHANGE. However, nothing was altered, because REORG had already started its switch phase.

System action

ALTER UTILITY has no effect.

Severity

4 (warning)

DSNU380I ***csect-name*** **TABLESPACE** ***database.tablespace-name*** **PARTITION** ***part-number*** **IS IN COPY PENDING**

Explanation

The specified object is in COPY-pending status.

csect-name
The name of the control section that issued the message.

database-name
The name of the database.

tablespace-name
The name of the table space.

part-number
The value that identifies the partition or data set.

An image copy is required to establish a new base from which the table space partition can be recovered. Otherwise, the results of running the RECOVER utility on that table space partition are unpredictable.

If you receive this message when running RECOVER with the TOCOPY option, the START_RBA or START_LRSN value of the associated full image copy might be outside of the available recovery information. To verify whether this situation applies to you, run the REPORT utility with the RECOVERY option and look at the information about image copies in the output. In this case, RECOVER completes processing and puts the object in COPY-pending status.

User response

Take an image copy of the associated table space partition.

If this message was issued after the COPY utility failed, correct all specified errors for the associated table space before you attempt another image copy of that table space.

Severity

4 (warning)

Related reference
COPY-pending status (Db2 Utilities)
REPORT (Db2 Utilities)

DSNU381I ***csect-name*** **TABLESPACE** ***database.tablespace-name*** **IS IN COPY PENDING**

Explanation

This message is issued after:

- A LOAD or REORG utility with the LOG(NO) option left the associated table space in an unrecoverable state.
- An image copy failed because broken pages were detected or an image copy was terminated.
- A partial recovery finished successfully.
- A MODIFY RECOVERY left the associated table space in an unrecoverable state.

  If the RECOVER TABLESPACE utility with keyword TOCOPY is being used, the START_RBA or START_LRSN value of the associated full image copy might be outside the available recovery information. To verify this, look at the REPORT utility output. The RECOVER TABLESPACE utility will process the TOCOPY keyword and put the recovering object in copy pending status.

An image copy is required to establish a new base from which the table space can be recovered. Otherwise, the results of running the RECOVER utility on that table space are unpredictable.

User response

Take an image copy of the associated table space. If the message was issued after the COPY utility failed, correct all specified errors for the associated table space before attempting another image copy on that table space.

Severity

4 (warning)

DSNU382I ***csect-name*** **-** ***utility*** **UTILITY, UTILID =** ***utilid*** **REQUESTED TO ALTER, PHASE =** ***utility-phase***

Explanation

When you issue a -ALTER UTILITY command, Db2 issues this message in response. It acknowledges that the request for alteration was received and verified. At the time the -ALTER UTILITY request was received, the *utility* was in the utility job step identified by UTILID *utilid*.

System action

Db2 has accepted the request to alter the indicated utility job step. The utility alters its parameter values.

User response

This message is an acknowledgement that the request has been accepted and is in progress.

Severity

0 (informational)

DSNU383I ***csect-name*** **CURRENT ITERATION NUMBER =** ***nnnnnn*** **WRITE ACCESS ALLOWED IN CURRENT ITERATION =** ***www*** **ITERATION BEFORE PREVIOUS ITERATION: ELAPSED TIME =** ***ha:ma:sa*** **NUMBER OF LOG RECORDS PROCESSED =** ***nnnnna*** **PREVIOUS ITERATION: ELAPSED TIME =** ***hb:mb:sb*** **NUMBER OF LOG RECORDS PROCESSED =** ***nnnnnb*** **CURRENT ITERATION: ESTIMATED ELAPSED TIME =** ***hc:mc:sc*** **ACTUAL ELAPSED TIME SO FAR =** ***hd:md:sd*** **ACTUAL NUMBER OF LOG RECORDS BEING PROCESSED =** ***nnnnnd*** **CURRENT ESTIMATE FOR NEXT ITERATION: ELAPSED TIME =** ***he:me:se*** **NUMBER OF LOG RECORDS TO BE PROCESSED =** ***nnnnne***

Explanation

This message is displayed in one of the following circumstances:

- As part of the output from the DISPLAY UTILITY command
- When the REORG INDEX or REORG TABLESPACE utility estimates that the SWITCH phase will not start by the deadline that is specified in the DEADLINE option

In either case, this message is described as part of the DISPLAY UTILITY output in "DSNU100I" on page 633.

DSNU384I ***csect-name*** **- MAXRO =** ***maxro-value*** **SECONDS LONGLOG =** ***longlog-value*** **DELAY =** ***delay-value*** **SECONDS**

Explanation

This message is displayed in one of the following circumstances:

- As part of the output from the DISPLAY UTILITY command
- When the REORG INDEX or REORG TABLESPACE utility estimates that the SWITCH phase will not start by the deadline that is specified in the DEADLINE option

In either case, this message is described as part of the DISPLAY UTILITY output in "DSNU100I" on page 633.

DSNU385I ***csect-name*** **- LOG PHASE COMPLETE, ELAPSED TIME =** ***hh/mm/ss***

Explanation

This message is issued at the normal completion of the LOG phase of the utility. The time that has elapsed between the beginning and the completion of this phase is measured in units of:

hh
Hours

mm
Minutes

ss
Seconds

System action

Processing continues to the next phase of the utility.

Severity

0 (informational)

DSNU386I ***csect-name*** **- LOG PHASE STATISTICS. NUMBER OF ITERATIONS =** ***iiiiiiii*****, NUMBER OF LOG RECORDS =** ***rrrrrrrr***

Explanation

This message is issued at the normal completion of the LOG phase of the utility.

iiiiiiii
The number of iterations of log processing that were performed. This number includes one or more iterations during which applications have read/write access plus one final iteration during which applications have read-only access.

rrrrrrrr
The number of log records that were read.

Application of some of these log records might be unnecessary. Therefore, the LOG phase might apply only a subset of these log records to the shadow copy of the table space or partition.

System action

The LOG phase of the utility is completed.

Severity

0 (informational)

DSNU387I ***csect-name*** **- SWITCH PHASE COMPLETE, ELAPSED TIME =** ***hh/mm/ss***

Explanation

The SWITCH phase of the utility completed normally.

csect-name
The name of the control section that issued the message.

hh/mm/ss
The time that elapsed between the beginning and the completion of this phase.

hh
The number of hours.

mm
The number of minutes.

ss
The number of seconds.

System action

Processing continues to the next phase of the utility.

Severity

0 (informational)

Related reference
REORG TABLESPACE (Db2 Utilities)
REORG INDEX (Db2 Utilities)

DSNU390I ***csect-name*** **INVALID CONVERSION FOR FIELD** ***cccccccc***

Explanation

The input field type for column, *cccccccc*, is incompatible with its data type (as found in the catalog).

System action

Utility processing is terminated.

User response

Correct the error, and resubmit the job.

Severity

8 (error)

Related concepts
Db2 online utilities (Db2 Utilities)
Db2 stand-alone utilities (Db2 Utilities)

DSNU391I ***csect-name*** **- SORTBLD PHASE STATISTICS. NUMBER OF INDEXES =** ***mmm***

Explanation

This message is issued at normal completion of the SORTBLD phase of the LOAD, REORG, or REBUILD INDEX utility. The number of indexes that were built is indicated as *mmm*.

System action

The SORTBLD phase of either the LOAD, REORG, or REBUILD INDEX utility is completed.

Severity

0 (informational)

DSNU392I ***csect-name*** **- SORTBLD PHASE COMPLETE, ELAPSED TIME =** ***hh:mm:ss***

Explanation

This message is issued at the normal completion of the SORTBLD phase of the LOAD, REORG, and REBUILD INDEX utility. The time that has elapsed between the beginning of the phase and the completion of this phase was *hh* hours, *mm* minutes, and *ss* seconds.

System action

Processing continues to the next phase of the LOAD, REORG, or REBUILD INDEX utility. If this is the last phase, processing continues to the next utility statement in the utility job step, if any.

Severity

0 (informational)

DSNU393I ***csect-name*** **SORTBLD PHASE STATISTICS - NUMBER OF KEYS =** ***nnnnnnnn*** **FOR INDEX** ***index-name*** **PART** ***part-num***

Explanation

This message is issued by the SORTBLD phase of the LOAD, REORG, or REBUILD INDEX utility to report the total number of index key entries used to build the indicated index partition.

System action

This message indicates the number of index key entries for the index partition being built. Both unique and nonunique key entries are counted. Rejected key entries are not counted.

User response

You can verify that the number reported is consistent with expectations.

Severity

0 (informational)

DSNU394I ***csect-name* SORTBLD PHASE STATISTICS. NUMBER OF KEYS = *nnnnnnnn* FOR INDEX *index-name***

Explanation

This message is issued by the SORTBLD phase of the LOAD, REORG, or REBUILD INDEX utility. This message is repeated for each index that is built by the LOAD, REORG, or REBUILD INDEX utility.

csect-name
The name of the control section that issued the message.

nnnnnnnn
The total number of index key entries that are used to build the indicated index. Both unique and non-unique key entries are counted. Rejected key entries are not counted. If the index is a partitioning index, the total equals the sum of the number of index key entries that are reported in prior DSNU393I messages.

index-name
The name of the index.

System action

Processing continues.

User response

You can verify that the number reported is consistent with expectations. For example, you can determine whether the number matches the number of records that were loaded into the table that is indexed by the indicated index. The number of loaded records is reported in message DSNU302I, DSNU303I, or DSNU304I. The number of mapping index keys that are processed does not need to match the total number of data records that are reloaded.

Severity

0 (informational)

Related information

DSNU393I
csect-name SORTBLD PHASE STATISTICS - NUMBER OF KEYS = *nnnnnnnn* FOR INDEX *index-name* PART *part-num*

DSNU302I
csect-name (RE)LOAD PHASE STATISTICS - NUMBER OF INPUT RECORDS PROCESSED = *nnnnnnnn*

DSNU303I
csect-name (RE)LOAD PHASE STATISTICS - NUMBER OF RECORDS= *nnnnnn* FOR TABLE *table-name* PART=*part-number*

DSNU304I
csect-name (RE)LOAD PHASE STATISTICS - NUMBER OF RECORDS = *nnnnnn* FOR TABLE *table-name*

DSNU395I ***csect-name* INDEXES WILL BE BUILT IN PARALLEL, NUMBER OF TASKS = *nnnn***

Explanation

The CHECK INDEX, LOAD, REORG, or REBUILD INDEX utility is able to build indexes in parallel.

csect-name
The name of the control section that issued the message.

nnnn
The number of utility tasks that are used to build the indexes.

System action

Utility processing continues in the RELOAD phase.

User response

You can verify that the number of tasks reported is consistent with expectations. For example, if 3 indexes are to be built, you might expect to see number of tasks as 6.

Severity

0 (informational)

DSNU396I ***csect-name* REPORT PHASE COMPLETE, ELAPSED TIME = *hh/mm/ss***

Explanation

The REPORT phase of the LOAD utility has completed normally. The elapsed time for the execution was 'hh' hours, 'mm' minutes, and 'ss' seconds.

Severity

0 (informational)

DSNU397I ***csect-name*** **NUMBER OF TASKS CONSTRAINED BY** ***resource-type*** **TO** ***number-of-tasks***

Explanation

A utility is able to start subtasks to perform operations in parallel. However, the number of tasks that it can use has been constrained by a lack of some resource.

csect-name
The name of the control section that issued the message.

resource-type
The constraining resource. *resource-type* can have one of the following values:

VIRTUAL STORAGE
Insufficient virtual storage exists in the address space in which the utility job is running.

VIRTUAL STORAGE BELOW
Insufficient virtual storage exists below the line in the address space in which the utility job is running.

DD STATEMENTS
In the JCL DD statements, fewer sort work data set groups or sort message data sets have been specified than the maximum number of tasks than the utility could otherwise start.

KEYWORDS
Either a keyword was missing in the utility statement or a keyword was specified that prohibits parallel processing. For dynamic allocation of sort work data sets, SORTDEVT must be specified. For the REORG utility unload and reload parallel processing, NOSYSREC must be specified on the unload template, and TAPESTACK is not permitted.

CPUS
Starting additional tasks would overtax the available CPUs.

SWA=BELOW
Insufficient storage exists below the line in the address space in which the job is running.

PARALLEL N
The PARALLEL keyword limits the number of tasks to be started.

ZPARM PARAMDEG_UTIL
The setting of the PARAMDEG_UTIL subsystem parameter limits the number of tasks to be started.

number-of-tasks
The maximum number of tasks that can be started after applying the constraint.

This value might be different than what you specified, if the constraint is less than the minimum number of tasks that are needed for the utility to complete.

System action

Processing continues.

User response

No action is required. However, if you want to increase the number of tasks that are used by the utility to reduce the elapsed time of the utility job, consider the following possible actions based on the value of *resource-type*:

VIRTUAL STORAGE
Increase the amount of virtual storage that is available to the utility job by specifying a larger region size in the job JCL, altering the JES defaults for region size, or changing the system IEFUSI exit to allow a larger virtual region. If the utility is using BSAM data sets for which the number of buffers have been specified (BUFNO specified in the DCB field of the DD statement for the data set), consider reducing the number of buffers.

VIRTUAL STORAGE BELOW
If possible, increase the amount of below-the-line virtual storage that is available to the utility job by specifying a larger region size in the job JCL or reducing the number of data sets that are allocated in the job step. Relieving this constraint might not be possible.

DD STATEMENTS
Define additional groups of sort work data sets, or eliminate the SWnnWKmm DD statements and specify the SORTDEVT keyword (and, optionally, the SORTNUM keyword) to allow SORT to use dynamic allocation of its work data sets.

If the limitation is due to sort message data sets rather than sort work data sets, take one of the following actions:

- Define additional sort message DD statements
- Eliminate the UTPRINnn DD statements and allocate UTPRINT to SYSOUT so that the sort message data sets can be dynamically allocated.

KEYWORDS
To request dynamic allocation of sort work data sets, specify SORTDEVT in the utility statement. To request unload and reload parallel processing if no unload template is available, specify NOSYSREC in the utility statement. For unload and reload parallel processing, do not include TAPESTACK in the utility unload TEMPLATE statement.

CPUS
Submit the job to a member that has more processors.

SWA=BELOW
Move the SWA above the 16 MB line for the JOBCLASS. JES command, $DJOBCLASS(n), displays whether SWA is set to BELOW for CLASS n. The $TJOBCLASS(n),SWA=ABOVE command sets SWA to ABOVE the line. The $DSTCCLASS and $TSTCCLASS commands can be used to move SWA to ABOVE for the utilities that are running in a WLM Stored Procedure Environment. Consult with the MVS System Programmer on these changes.

Severity

0 (informational)

DSNU398I *csect-name* UNEXPECTED PROCESSING ERROR, REASON=X00E40318, ON TABLE *table-name*

Explanation

When attempting to load a record into table *table-name*, an error was encountered.

System action

If the error was caused by a resource not being available, a DSNT500I message is issued.

The utility step is abended with a system X'04E' with an abend reason code of '00E40318'. If a DSNT500I message is not issued, an SVC dump is requested. A SYSABEND dump of batch storage is also requested.

The utility step is left in the stopped state.

Operator response

An operator with SYSOPR authority can issue a TERM UTIL to free any held resources (this may not be necessary).

System programmer response

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

User response

If a DSNT500I message was issued, refer to its description under that message number in this manual. If the unavailable resource becomes available, the utility step is restartable.

If a DSNT500I message is not issued, the error is an internal error. Notify the system programmer.

Severity

8 (error)

Related reference
-TERM UTILITY (Db2) (Db2 Commands)
Related information
DSNT500I
csect-name RESOURCE UNAVAILABLE REASON *reason-code* TYPE *resource-type* NAME *resource-name*
00E40318 (Db2 Codes)

DSNU399I *csect-name* - LOAD UTILITY ERROR SUMMARY REPORT

Explanation

This message summarizes errors detected during the load job. The report contains one line for each error. The errors are listed first by error severity and within that by *idsrn*.

The report fields have the following meanings:

sev

The severity of the error reported on this line:

Severity	Type of error	Explanation
1	Primary	Primary referential integrity errors and all nonreferential integrity errors.
2	Secondary	Secondary referential integrity errors (that is, errors that result from a primary referential integrity error in an ancestor).

idsrn
The relative record number in the input data set of the record causing the error reported on this line.

ddsrn
The relative record number in the input data set of the record causing the error reported on this line, if

discard processing is in effect. Otherwise, *ddsrn* is blank.

type
A description of the type of error reported on this line, as follows:

- Conversion
- Field specification
- Validation
- Part Specification
- Unexpected
- Column specification
- Referential integrity
- Check constraint
- Duplicate key
- Key evaluation error
- XML document error

name1
The name of the table for which the record causing the error was targeted, if this information is pertinent for the type of error reported on this line. Otherwise, *name1* is blank. This field has nonblank values for the following error types:

- Conversion
- Validation
- Column specification
- Referential integrity (primary).
- Check constraint

name2
The name of the field or fanset involved in the error reported on this line, if this information is pertinent for the type of error reported. Otherwise, *name2* is blank. This field contains a field name for the following types of errors:

- Conversion
- Field specification
- Column specification.

For primary referential integrity errors, *name2* is a relationship name. For check constraint errors, *name2* is a check constraint name.

idsrn2
The input data set record number of a related error. For duplicate key errors, it gives the input data set record number of the record whose key is duplicated. For secondary referential integrity errors, it gives the input data set record number of the record whose primary referential integrity error cascaded to cause this secondary error. For other types of errors, this field is unused.

System action

Processing continues.

Severity

4 (warning)

DSNU400I ***csect-name*** **COPY PROCESSED FOR** ***object-type object-qualifier.object-name*** **NUMBER OF PAGES=***total-pages* **AVERAGE PERCENT FREE SPACE PER PAGE =** ***free-space*** **PERCENT OF CHANGED PAGES =** ***changed-pages*** **ELAPSED TIME=** ***hh:mm:ss***

Explanation

This is an informational message to report the copy statistics. This message is issued by the following utilities:

- COPY
- LOAD, if a full image copy has been requested during a table space load
- REORG, if a full image copy has been requested during a table space reorganization

The statistics apply to pages that are included in the scope of the COPY request: a full table space, a full index space (DSNUM(ALL)), or a partition (DSNUM(integer)). All of the pages in the table space, index space, or partition can be copied (FULL(YES)), or only the changed pages can be copied (FULL(NO)).

csect-name
The name of the control section that issued the message.

object-type
The type of object.

object-qualifier.object-name
The name of the object, as a qualified name.

total-pages
The number of pages written out. The number of pages written includes valid instances where pages are written more than once, or for incremental copies, pages written which have not changed since the last copy was taken. A slight discrepancy between this value and the actual number of pages is possible and is considered normal.

free-space
The average percentage of free space within the copied pages, in the format *nn.nn*. This value indicates the amount of change activity that can occur without significant impairment of reference performance.

This value is 0 for sequential copies made from a FlashCopy.

changed-pages
The percentage of changed pages, to two decimal places (*nn.nn* or 100.00). This value indicates the amount of change activity that occurred since the last image copy or reorganization. The percentage of changed pages is obtained by dividing the number of changed pages by the number of pages in the object. Preformatted pages consisting of all zeros are included in the count of pages scanned. Because these preformatted pages are not copied to the output data set, the number of pages scanned is usually larger than the number of pages copied.

When this message is issued for image copies produced during LOAD or REORG, this percentage will always be reported as 100.00 (100%), because the utility is resetting and reformatting the entire table space.

This value is 0 for sequential copies made from a FlashCopy.

hh:mm:ss
The elapsed time, shown as the number of hours, minutes, and seconds.

System action

The COPY, LOAD or REORG utility continues processing. Message DSNU428I is issued when the copy processing is complete.

User response

No action is required.

You can use this information to help you make decisions about your strategies, such as:

- Use of REORG or RUNSTATS
- Your overall recovery strategy, including decisions about using incremental copies
- Storage allocation

Related reference
RUNSTATS (Db2 Utilities)
REORG TABLESPACE (Db2 Utilities)
Related information
DSNU428I
csect-name DB2 IMAGE COPY SUCCESSFUL FOR *obj-type obj-qual.obj-name*

DSNU401I ***csect-name*** **CONCURRENT COPY COMPLETE, ELAPSED TIME=** ***hh*****:****mm*****:****ss***

Explanation

The DFSMS Concurrent Copy utility completed normally.

System action

Processing continues to the next utility statement in the utility job step. If there are no more utility statements, the utility job step is normally terminated, and the resources are released to their prior availability state. The utility identifier (UTILID) of the utility job step becomes available for reuse.

User response

No action is required.

Severity

0 (informational)

DSNU402I ***csect-name*** **INCREMENTAL IMAGE COPY DISALLOWED FOR** ***object-type object-qualifier.object-name*** **FULL IMAGE COPY WILL BE TAKEN**

Explanation

An incremental image copy for a table space or data set was requested. However, a full image copy is required.

csect-name
The name of the control section that issued the message.

object-type
The type of object.

object-qualifier.object-name
The qualified object name.

Possible reasons why an incremental image copy is not allowed include the following situations:

- The request was for one of the following table spaces that are maintained by Db2:
  - DSNDB01.DBD01
  - DSNDB06.SYSCOPY
  - DSNDB01.SYSUTILX
  - DSNDB01.SYSDBDXA
- The LOAD utility or REORG TABLESPACE utility was run on the table space or data set, but no subsequent full image copy was taken.
- No full image copy was found for the requested sites.
- The requested table space or data set is in COPY-pending status.

- The request was for an entire table space, but the most recent image copy for the table space is at the data set level.
- The previous image copy is a DFSMS concurrent copy.

System action

The request for an incremental image copy is ignored, and a full image copy is taken.

User response

The size of the data set for the image copy might not be sufficient if the size was calculated for an incremental image copy. In that case, terminate the job. Then, specify a data set with the appropriate size for a full image copy, and resubmit the job. Otherwise, no action is necessary.

Severity

4 (warning)

Related concepts

Incremental image copies (Db2 Utilities)

Related reference

COPY-pending status (Db2 Utilities)

COPY (Db2 Utilities)

DSNU403I ***csect-name*** **- FULL AND INCREMENTAL COPIES OF THE SAME TABLESPACE ON THE SAME TAPE DISALLOWED DDNAME** ***ddname***

Explanation

The COPY utility has been invoked to take an incremental image copy of a TABLESPACE. The specified output data set is on a tape which contains another FULL or INCREMENTAL image copy of the same TABLESPACE. This is not allowed.

System action

The utility will terminate with a return code of 8, and will not take the image copy or update the SYSCOPY table.

User response

Change the VOLSER for the image copy output data set or use the MODIFY RECOVERY utility to delete SYSIBM.SYSCOPY records which are no longer needed for the same TABLESPACE and tape volume.

Problem determination

Use the SQL SELECT command to look at the SYSIBM.SYSCOPY table. If the conflicting image copy data sets on the output tape are no longer needed, use MODIFY RECOVERY to eliminate the related SYSIBM.SYSCOPY records. If the data sets are still needed, you must place the new image copy on a different tape or you must take a FULL image copy.

Severity

8 (error)

DSNU404I ***csect-name*** **LOCAL SITE AND RECOVERY SITE INCREMENTAL IMAGE COPIES ARE NOT SYNCHRONIZED FOR** ***obj-type obj-qual.obj-name***

Explanation

No incremental image copy can be made if

1. The incremental image copy is requested only for a site other than the current site.
2. The incremental image copies are requested for both sites but the most recent full image copy was made only for the current site.
3. The incremental image copies are requested for both sites and the most recent full image copies were made for both sites, but between the most recent full image copy and current request, all incremental image copies were made for current site only.

System action

The utility will terminate with a return code of 8, and will not take the image copy or update the SYSCOPY table.

User response

Take another full image copy of the TABLESPACE for both LOCAL site and RECOVERY site or change the request to make incremental image copy only for current site.

Severity

8(error)

DSNU406I **FULL IMAGE COPY SHOULD BE TAKEN FOR BOTH LOCAL SITE AND RECOVERY SITE FOR** ***obj-type obj-qual.obj-name***

Explanation

The requested full image is for one site only but history shows that there were image copies taken for both local site and recovery site and the table space is in copy pending status, or point in time recover has been done on the table space, or the table space is in copy pending status and the requested full image copy is for a site other than the current site. Be aware of the following situations:

1. If the requested copy is made for current site, then the other site can only do point in time recovery.
2. If the requested copy is for the site other than the current site, then the TABLESPACE will be in the same state as before COPY has been made.

System action

COPY, LOAD, or REORG utility will continue to process the image copy.

User response

Take another full image copy of the TABLESPACE for both LOCAL site and RECOVERY site to guarantee the correct recovery on both sites or check DSNZPARM to ensure that the current site is the site at which the image copy is being taken.

Severity

4 (warning)

DSNU407I ***csect-name*** **- DATA SET ALREADY USED FOR PREVIOUS IMAGE COPY DDNAME** ***ddname***

Explanation

A COPY, LOAD, or REORG utility has been invoked to take an image copy to a data set which is a duplicate of one already recorded in SYSCOPY. If the specified data set is cataloged, a matching DSNAME exists. If the specified data set is not cataloged, a matching DSNAME, DSVOLSER, and FILESEQNO exists.

System action

The utility will terminate with a return code of 8, and will not take the image copy or update the SYSCOPY table.

User response

Change the name of the data set or use MODIFY utility to delete the old SYSCOPY record containing the duplicate data set.

Severity

8 (error)

DSNU408I ***csect-name*** **-** ***dsn*** **EXISTS WITH - VOLUME=*vol*, FILE SEQUENCE-NUMBER=*fseq*, RBA=*rba*|*lrsn*, DATE=*date*, TIME=*time***

Explanation

If this message is issued after DSNU403I, it provides information from the SYSCOPY catalog table about the previously created image copy of the table space. If this message is issued after DSNU407I, it provides information from the SYSCOPY table about the duplicate data set that was detected during image copy processing.

For copies to DASD or MSS, *fseq* is 0; for copies of cataloged data sets, *vol* is (CATG).

System action

The utility terminates with return code 8 and does not take the image copy or update the SYSCOPY table.

User response

Use the information provided to change the name of the data set or to locate the duplicate SYSCOPY record for deletion with the MODIFY RECOVERY utility.

Severity

8 (error)

Related concepts

How RBA and LRSN values are displayed (Db2 Administration Guide)

DSNU409I ***csect-name*** **NO** ***hardware-or-software*** **SUPPORT FOR** ***obj-type obj-qual.obj-name***

Explanation

This message is issued by the COPY or RECOVER utility for one of the following reasons.

- The COPY utility was invoked to take a DFSMS concurrent copy of a table space or index space that resides on a device with no hardware or software support for the DFSMSdss DUMP command with the CONCURRENT option.
- The RECOVER utility invoked the DFSMSdss RESTORE command without the supporting software.

System action

The RECOVER utility falls back to the previous image copy data set and continues. The COPY utility job terminates.

User response

If a list of objects is specified in the COPY job, remove the object that has no hardware or software support from the list. Resubmit the job or use the Db2 COPY utility instead of the DFSMS Concurrent Copy utility.

Severity

4 (for RECOVER) or 8 (for COPY)

DSNU410I ***csect-name obj-type obj-qual.obj-name* CONTAINED NO CHANGED PAGES**

Explanation

An incremental image copy (COPY option FULL(NO)), which copies only changed pages, was requested. However, no changed pages were found.

System action

This message indicates normal completion of the image copy utility. Processing continues to the next utility statement in the utility job step, if any. If there are no more utility statements, the utility job step is normally terminated, and the resources are released to their prior availability state. The UTILID of the utility job step becomes available for reuse.

Because no output was produced, the SYSIBM.SYSCOPY catalog table remains unchanged.

The requester may want to determine why the apparent assumption that a change occurred was not true.

Operator response

The target copy data set identified by the DD statement nominated by the COPY COPYDDN option was not required. It was not tracked in the Db2 catalog table SYSIBM.SYSCOPY. It need not be kept for subsequent re-call.

Severity

4 (warning)

This message reflects a warning condition that did not prevent subsequent processing.

DSNU411I ***csect-name* UNABLE TO LOGICALLY COMPLETE *obj-type obj-qual.obj-name* RETURN CODE *return-code* REASON CODE *reason-code***

Explanation

The DFSMSdss DUMP command with the CONCURRENT option encountered an error during the initialization of the target object being copied. The return code and reason code are from the DFSMSdss DUMP command.

System action

The utility job terminates.

User response

See the return code and reason code in *z/OS DFSMSdss Storage Administration Reference* to determine the problem. Resubmit the job after resolving the problem.

Severity

8

DSNU412I ***csect-name* UNABLE TO PHYSICALLY COMPLETE *obj-type obj-qual.obj-name* RETURN CODE *return-code***

Explanation

The DFSMSdss DUMP command with the CONCURRENT option encountered an error during the backup process. The return code is from the DFSMSdss DUMP command.

System action

The utility job terminates.

User response

See the return code description in *z/OS DFSMSdss Storage Administration Reference* to determine the problem. Resubmit the job after resolving the problem, or use the Db2 Copy utility instead of the DFSMS Concurrent Copy utility for the failed object.

Severity

8

DSNU413I ***csect-name* - CONCURRENT COPY SUCCESSFUL FOR *obj-type obj-qual.obj-name***

Explanation

The DFSMS Concurrent Copy utility completed normally for the named object. This message is repeated for every copied object in the list.

System action

Processing continues to the next object in the list. If there are no more objects, the utility ends normally with message DSNU401I.

User response

No action is required.

Severity

0 (informational)

DSNU414I ***csect-name*** **UNABLE TO RETRIEVE RESTART/REDO LRSN** ***obj-type obj-qual.obj-name***

Explanation

This message is issued by the Db2 COPY utility when an error is encountered during the retrieval of a log record sequence number (LRSN).

This error can occur in these situations:

- Another Db2 in a data sharing group terminated abnormally while trying to update the table space or index space.
- A failure occurred while trying to communicate with other DB2s in the data sharing group.

System action

The utility job terminates.

User response

Issue a -DISPLAY DATABASE command with the USE option to determine if any other Db2 systems hold a retained lock on the table space or index space (status = RSTRT). If so, you must restart that Db2 system before the COPY job can be successfully run.

Severity

8

DSNU415I ***csect-name*** **INVALID OUTPUT BLOCK SIZE SPECIFIED DDNAME** ***ddname***

Explanation

Valid block sizes for an image copy or mergecopy data set are multiples of 4KB and less than the device limitation.

System action

Utility processing is terminated.

User response

Correct the JCL statement, or use the default. Resubmit the request in a new utility job step.

Severity

8 (error)

Related concepts

Db2 online utilities (Db2 Utilities)

Db2 stand-alone utilities (Db2 Utilities)

DSNU416I ***csect-name*** **THE OUTPUT IMAGE COPY DATA SET CANNOT BE PARTITIONED. DDNAME** ***ddname***

Explanation

The use of partitioned image copy data sets is restricted. The COPY, MERGECOPY, LOAD, or REORGutility job that was submitted has a partitioned output image copy data set, specified by the COPYDDN ddname or RECOVERYDDN ddname parameter.

System action

Utility processing is terminated. The image copy will not be taken or the merge will not be done, and the SYSIBM.SYSCOPY table will not be updated.

User response

Correct the utility job by specifying a nonpartitioned data set as the output image copy data set.

Severity

8 (error)

DSNU417I ***csect-name*** **THE NUMBER OF VOLUMES USED BY THE IMAGE COPY DATA SET** ***data-set-name*** **HAS REACHED THE LIMIT**

Explanation

The image copy data set reached the limit of 255 volumes and another volume is required.

System action

The utility job is terminated.

User response

You might want to use the DSNUM option of the COPY utility to identify a partition or data set within the table space to be copied, or specify a partition number to be loaded or reorganized if the copy is being produced from a LOAD or REORG.

Severity

8 (error)

Related reference

Syntax and options of the COPY control statement (Db2 Utilities)

Syntax and options of the LOAD control statement (Db2 Utilities)

Syntax and options of the REORG INDEX control statement (Db2 Utilities)

Syntax and options of the REORG TABLESPACE control statement (Db2 Utilities)

DSNU418I *csect-name* CANNOT TAKE IMAGE COPY AT DATASET LEVEL FOR NONPARTITIONED TABLESPACE *obj-qual.obj-name* IN COPY PENDING STATUS

Explanation

An image copy at the data set level was requested. However, it is not allowed for one of the following reasons:

- The table space is in copy pending status.
- The table space is not suitable for image copy at the data set level.

A copy of the entire table space is required.

System action

The COPY utility completes unsuccessfully with return code 8.

System programmer response

You must take a full image copy of the entire table space by specifying the DSNUM ALL option with the COPY utility.

Severity

8 (error)

DSNU419I *csect-name* UTILITY CANNOT PROCESS *obj-typeobj-qual.obj-name* WITH MIXED SPECIFIC AND NONSPECIFIC VOLUME IDS.

Explanation

The requested object cannot be processed, because it was defined to use a Db2 storage group with mixed specific and nonspecific volume IDs. A specific volume ID is represented by a string with a maximum of 6 characters. A nonspecific volume ID is represented by an asterisk (*).

csect-name
The name of the control section that issued the message.

obj-type
The type of object.

obj-qual.obj-name
The qualified object name.

System action

The utility completes unsuccessfully with return code 8.

System programmer response

Use the ALTER STOGROUP statement to change the storage group to contain only specific or nonspecific volume IDs and rerun the job.

Severity

8 (error)

Related reference

ALTER STOGROUP (Db2 SQL)

DSNU420I *csect-name* INCORRECT SHARE LEVEL SPECIFIED FOR TABLE SPACE *database-name.tablespace-name* DSNUM *dsnum*

Explanation

When copying a table space that is not recoverable, the share level (SHRLEVEL) must be REFERENCE.

If the object is an entire table space, 'DSNUM *dsnum*' is not displayed.

System action

Utility processing is terminated.

User response

Correct the SHRLEVEL to REFERENCE, and resubmit the COPY utility in a new utility job step.

Severity

8 (error)

Related reference

COPY (Db2 Utilities)

Syntax and options of the COPY control statement (Db2 Utilities)

DSNU421I ***csect-name*** **- START OF DFSMS MESSAGES**

Explanation

This message indicates the beginning of the DFSMS messages; DSNU422I indicates the end.

System action

No action is required, but subsequent DFSMS messages might require action. See the DFSMS documentation for further information.

DSNU422I ***csect-name*** **- END OF DFSMS MESSAGE**

Explanation

This message indicates the end of the DFSMS messages; DSNU421I indicates the beginning.

System action

No action is required, but preceding DFSMS messages might require action. See the DFSMS documentation for further information.

DSNU423I ***csect name*** **CANNOT TAKE CONCURRENT COPY WITH SHRLEVEL CHANGE OPTION FOR** ***obj-type obj-qual.obj-name*** **WITH GREATER THAN 4KB PAGE SIZE**

Explanation

The DFSMS Concurrent Copy utility is serialized at the extent level. The greater than 4KB page size condition might span more than one extent. This might cause the output data set to contain inconsistent data.

System action

The COPY utility completes unsuccessfully with return code 8.

System programmer response

You must take a concurrent copy with the SHRLEVEL REFERENCE option or a Db2 image copy if you prefer the SHRLEVEL CHANGE option.

Convert the data set attribute Control Interval size of the associated tablespace from the 4K Control Interval into the one that matches the page size. Db2 Utilities REORG Tablespace, LOAD with REPLACE, and RECOVER can be used to convert the table space.

Severity

8 (error)

DSNU424I ***csect-name*** **INCOMPATIBLE MAINTENANCE DETECTED. REFERENCE APAR NUMBER** ***apar*** **DO THE FOLLOWING:**

Explanation

This message indicates that there is a maintenance incompatibility detected across restart. This message is followed by the actions the user should take to resolve the incompatibility.

apar
The number of the APAR with closing text that describes the incompatibility.

System action

Utility execution is abended.

System programmer response

Refer to the APAR closing text.

User response

Refer to the action text in the message.

DSNU425I ***csect-name obj-type obj-qual.obj-name*** **DOES NOT HAVE THE COPY YES ATTRIBUTE**

Explanation

The utility cannot process the identified index or index space because it was not defined with the COPY YES attribute. Without the COPY YES attribute, the index cannot be specified as a target for the RECOVER, COPY, or REPORT utilities. If the index needs to be rebuilt from the data in the table space, use the REBUILD INDEX utility instead.

System action

The RECOVER utility terminates processing with a return code of 8. The COPY utility skips this object but continues processing the other objects in the list. The final COPY utility return code will be 8. The REPORT utility issues this message with a return code of 4 and continues processing other objects (if any).

User response

Determine whether the index should be altered to have the COPY YES attribute. If so, alter the index then rerun the utility job. Otherwise remove the index from the utility statement.

Severity

4 (warning) or 8 (error)

DSNU426I ***csect-name*** **CANNOT COPY ONE PIECE OF NON-PARTITIONING** ***obj-type obj-qual.obj-name***

Explanation

The copy of a nonpartitioning index at the data set level is not allowed.

System action

The COPY utility skips this object but continues processing the other objects in the list. The final COPY utility return code will be 8.

User response

Either remove the DSNUM option so that it defaults to DSNUM(ALL) or modify your DSNUM option to DSNUM(ALL).

Severity

8 (error)

DSNU427I ***csect-name*** **OBJECTS WILL BE PROCESSED IN PARALLEL, NUMBER OF OBJECTS =** ***maximum-objects***

Explanation

This message indicates the maximum degree of parallelism that the COPY or RECOVER utility is able to process.

csect-name
The name of the control section that issued the message.

maximum-objects
The maximum number of objects that can be processed in parallel, based on available resources. This value can differ from the actual number of objects that are processed in parallel. For example, if 100 objects are to be recovered and the image copies are on a single tape, then only one object can be processed at a time.

System action

Processing continues.

User response

No action is required.

You can verify that the number of objects processed is consistent with expectations.

Severity

0 (informational)

Related reference
COPY (Db2 Utilities)
RECOVER (Db2 Utilities)

DSNU428I ***csect-name*** **DB2 IMAGE COPY SUCCESSFUL FOR** ***obj-type obj-qual.obj-name***

Explanation

The image copy of the object processed by the COPY, LOAD, or REORG utility has completed successfully and the image copy data set information has been recorded in the SYSIBM.SYSCOPY catalog table.

System action

The COPY utility continues its processing on the next object in the list. The LOAD and REORG utilities continue processing in the subsequent phases.

DSNU429I ***csect-name*** **RECOVERY OF** ***objecttype database-name.tablespace-name*** **MUST BE EXECUTED AT THE PARTITION LEVEL**

Explanation

You must recover the partitioned object at the partition level. You may receive this message if you are using COPY with the CONCURRENT option. The use of online REORG (SHRLEVEL REFERENCE or CHANGE) has created a mixture of 'I0001' and 'J0001' instance nodes (fifth qualifier) for the underlying LDS's for the partitions of this object.

System action

Utility processing continues.

Severity

0 (informational)

DSNU430I *csect-name* - ERROR ALLOCATING TEMPORARY FILTER FOR *obj-type obj-qual.obj-name* DSN=*name* CODE=X'*reason-code*'

Explanation

The z/OS DYNALLOC service (SVC 99) returned an error during the dynamic allocation of a temporary filter data set.

The COPY utility with the CONCURRENT option detected that the number of data sets to be processed exceeds the DFSMSdss DUMP command limitation of 255. The utility attempted to dynamically allocate a temporary filter data set for the object and generate a DFSMSdss DUMP command with the FILT option.

csect-name
The name of the control section that issued the message.

obj-type
The type of object.

obj-qual.obj-name
The qualified name of the object.

name
The data set name.

reason-code
The reason code from the z/OS DYNALLOC (SVC 99) service.

System action

Utility processing halts for this object.

The utility job completes with a return code of 8.

If the utility job step includes an OPTIONS utility control statement with the EVENT(ITEMERROR,SKIP) option, the utility processes the next item in the list.

User response

Correct the error that is preventing dynamic allocation, and resubmit the utility job. In some cases where dynamic allocation might not be possible, consider using the FILTERDDN option of COPY.

Severity

8 (error)

Related reference

Interpreting DYNALLOC return codes (MVS Programming Authorized Assembler Services Reference)

COPY (Db2 Utilities)

OPTIONS (Db2 Utilities)

DSNU431I *csect-name* - ERROR ALLOCATING TEMPORARY FILTER FOR *obj-type obj-qual.obj-name* DSNUM=*name* CODE=X'*reason-code*'

Explanation

An error returned during the dynamic allocation of a temporary filter data set. This message is followed by text that explains *reason-code*.

The RECOVER utility was run with the CURRENTCOPYONLY option and has detected that the number of data sets to be processed exceeds the DFSMSdss RESTORE command limitation of 255. Db2 dynamically allocates a temporary filter data set for the object and generates a DFSMSdss RESTORE command with the FILT option.

System action

If the utility job step includes an OPTIONS control statement with the EVENT(ITEMERROR,SKIP) option, the utility processes the next item in the list. Otherwise, utility processing stops with return code of 8.

User response

Correct the error that prevents dynamic allocation and resubmit the utility job. If dynamic allocation is not possible, remove be possible, remove the CURRENTCOPYONLY option on the RECOVER utility statement.

Severity

8 (error)

DSNU432I *csect-name* - ERROR DURING DFDSS RESTORE OBJECT FOR *obj-type obj-qual.obj-name*. THE OBJECT IS NOT RECOVERED

Explanation

The RECOVER utility received an error notification from DFdss on object *obj-qual.obj-name*. The object has not been restored, but recovery of the other objects continues.

System action

RECOVER processes the other objects.

When RECOVER completes, it displays all objects for which CURRENTCOPYONLY was specified.

User response

Remove the CURRENTCOPYONLY keyword from the utility control statements.

Severity

4 (warning)

DSNU434I ***csect-name*** **- TEMPLATE** ***template-name*** **HAS THE STACK YES OPTION ON** ***dd-name*** **DATA SET WHICH IS NOT SUPPORTED FOR** ***utility-name*****.**

Explanation

Template processing has detected tape stacking on an output data set which is not supported.

System action

If the utility job step includes an OPTIONS control statement with the EVENT(ITEMERROR,SKIP) option, the utility processes the next item in the list. The utility will end with RC8 and subsequent utility statements in the job step are not executed. Otherwise, if EVENT(ITEMERROR,HALT) is specified or defaulted to, the utility processing stops immediately with a return code of 8 and subsequent utility statements in the job step are not executed.

User response

Remove the STACK YES option from the TEMPLATE statement, then resubmit the job.

Severity

8 (error)

DSNU437I **RESTART OF COPY ON** ***object-type object-qualifier.object-name DSNUM n*** **IS NOT ALLOWED**

Explanation

Restart of a COPY utility on the identified object is not allowed because a REORG utility reorganized the data.

object-type
The type of object to be copied.

object-qualifier.object-name
The qualified name of the identified object in the COPY utility.

DSNUM n
The data set number of the object. *DSNUM n* is omitted from the message text if:

- DSNUM is not specified on the COPY utility statement.
- DSNUM ALL is specified on the COPY utility statement.

System action

The utility halts processing for this object. If the utility job step includes an OPTIONS control statement with EVENT(ITEMERROR,SKIP) the utility processes the next item in the list. Otherwise, utility processing terminates.

System programmer response

Run the REPORT RECOVERY utility for the object. Examine the REPORT RECOVERY output. Submit another COPY utility to create a backup of the object needed.

Severity

8 (error)

Related reference

Concurrency and compatibility for COPY (Db2 Utilities)

DSNU438I ***csect-name*** **LOAD UTILITY NOT ALLOWED AGAINST AN ACCELERATOR ONLY TABLE** ***table-name***

Explanation

An attempt has been made to run the LOAD utility against an accelerator-only table. This is not allowed.

csect-name
The name of the control section that issued the message.

table-name
The name of the table.

System action

Utility processing terminates.

System programmer response

If the *table-name* was incorrect, correct the *table-name* and resubmit the utility job step.

Severity

8 (error)

DSNU440I ***csect-name*** **IMAGE COPY INFORMATION**

Explanation

This message gives statistical information about the results of running the COPY utility. The information applies to a table space, partition, or data set, and is based on the information in the space page map at the time the utility is executed.

csect-name
The name of the control section that issued the message.

This message contains the following information:

DBNAME
The name of the database to which the table space belongs.

TSNAME
The table space that is specified in the utility statement.

DSNUM
The partition or data set number of the table space. The value is ALL if information is about the entire table space.

***nn*KB PAGES**
The total number of *nn*KB pages in the partition, data set, or entire table space. This value includes preformatted pages that contain all zeros.

EMPTY PAGES
The total number of empty pages in the data set of the segmented table space, or entire segmented table space. Empty pages can result from deletes, or are pages that are not yet formatted. They are not copied by the utility.

CHANGED PAGES
The number of pages in the partition, data set, or table space that were changed since the last time an image copy was created.

PERCENT OF CHANGED PAGES
The percent of changed pages in the table space, data set, or partition specified.

ICTYPE
The type of image copy recommended for the partition, data set, or table space specified. ICTYPE is based on the comparison between the percent of changed pages and the change limit values. ICTYPE values:

I
If the percent of changed pages is greater or equal to the low CHANGELIMIT value and less than the high CHANGELIMIT value. An incremental image copy is recommended, or COPY takes one if the REPORTONLY option is not specified.

F
If the percent of changed pages is equal to or greater than the high CHANGELIMIT value. A full image copy is recommended, and COPY takes one if the REPORTONLY option is not specified.

NONE
If no pages were changed. An image copy is not recommended, and COPY does not take one.

blank
For the partition or data set if DSNUM ALL is specified, or if CONCURRENT is specified and the percent of changed pages is less than the CHANGELIMIT value.

System action

Utility processing continues

User response

If the message indicates, "INFORMATION CANNOT BE DETERMINED" for a table space, partition, or data set, examine the utility output for the DSNU441I message which lists the page numbers of the broken pages. See message DSNU441I for further instructions on repairing pages.

Severity

0 (informational)

Related reference
COPY (Db2 Utilities)
Related information
DSNU441I
csect-name BROKEN PAGE FOUND DBNAME = dbname TSNAME = tsname DSNUM = dsnum PAGE = page ERRORCODE = *error-code*

DSNU441I **csect-name BROKEN PAGE FOUND DBNAME = dbname TSNAME = tsname DSNUM = dsnum PAGE = page ERRORCODE = *error-code***

Explanation

The COPY utility found a broken space map page.

dbname
The name of the database to which the table space belongs.

tsname
The table space containing the broken page.

dsnum
The partition or data set number of the table space containing the broken page.

page
The hexadecimal page number of the broken page.

error-code
The specific cause of the problem. Only some CSECT modules issue an error code. If the CSECT module does not issue an error code, the message that you receive will not list the ERRORCODE keyword and value.

System action

Utility execution continues.

User response

The data sets identified are in an indeterminate state. Use RECOVER, RECOVER PAGE, or the REPAIR utility to correct the broken page. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Severity

8 (error)

DSNU442I ***csect-name*** **CHANGELIMIT REPORT INFORMATION UNAVAILABLE FOR** ***obj-type obj-qual.obj-name*** **WITH TRACKMOD NO**

Explanation

This message is issued in response to a COPY utility. The CHANGELIMIT option cannot produce statistical information for a table space or a partition that is defined with TRACKMOD NO, or before a copy has been taken after the TRACKMOD attribute has been changed from NO to YES.

System action

If REPORTONLY is not specified then a full image copy will be taken.

User response

To obtain complete statistical information run CHANGELIMIT REPORTONLY after a copy has been taken.

Severity

4 (informational)

DSNU443I **csect-name type CHANGE LIMIT MET FOR** ***obj-type obj-qual.obj-name***

Explanation

The COPY utility is indicating whether the percent of changed pages in the specified table space, partition, or data set meets the CHANGELIMIT values. *type* values:

NO
If no CHANGELIMIT met.

INCREMENTAL
If the percent of changed pages is greater than the low CHANGELIMIT value and less than the high CHANGELIMIT value.

FULL
If the percent of changed pages is greater than or equal to the high CHANGELIMIT value.

System action

Utility processing continues.

User response

If the REPORTONLY option is specified and the result of this job step is not used to conditionally execute other job steps, examine the utility messages for this table space, partition, or data set to determine if it has changed to such a degree that an image copy or other step should be performed.

Severity

The return codes are:

1 (informational)
If no CHANGELIMIT was met.

2 (informational)
If the percent of changed pages is greater than the low CHANGELIMIT and less than the high CHANGELIMIT value.

3 (informational)
If the percent of changed pages is greater than or equal to the high CHANGELIMIT value.

DSNU445I **csect-name** ***ictype*** **IMAGE COPY WILL BE TAKEN FOR** ***obj-type obj-qual.obj-name***

Explanation

The COPY utility is indicating whether the percent of changed pages in the table space meets the change limit value, and whether an image copy will be taken. *ictype* values:

NO
If no CHANGELIMIT value met.

INCREMENTAL
If the percent of changed pages is greater than the low CHANGELIMIT value and less than the high CHANGELIMIT value.

FULL
If the percent of changed pages is greater than or equal to the high CHANGELIMIT value.

System action

Utility processing continues. An image copy is taken if a change limit is met. If the low CHANGELIMIT value is met, then an incremental copy is taken. If the high CHANGELIMIT value is met, then a full image copy is taken.

Severity

0 (informational)

DSNU446I ***csect-name*** **- CHANGELIMIT REPORT INFORMATION UNAVAILABLE FOR** ***object-type object-qualifier.object-name*****, A FULL IMAGE COPY MUST BE TAKEN**

Explanation

The COPY utility was run with the CHANGELIMIT option. However, the required data set statistical information was not available. To use the CHANGELIMIT option, a full image copy must exist for the target object.

csect-name
The name of the control section that issued the message.

object-type
The type of object.

object-qualifier.object-name
The qualified object name.

Possible reasons why the statistical information is not available include:

- The request was for one of the following table spaces that are maintained by Db2: DSNDB01.DBD01, DSNDB06.SYSCOPY, DSNDB01.SYSUTILX, or DSNDB01.SYSDBDXA.
- The LOAD utility or REORG TABLESPACE utility was run on the table space or data set, but no subsequent full image copy was taken.
- No full image copy was found for the requested sites.
- The requested table space or data set is in COPY-pending status.
- The request was for an entire table space, but the most recent image copy for the table space is at the data set level.
- The previous image copy is a DFSMS concurrent copy.
- The previous image copy is a FlashCopy image copy.
- The previous image copies are a FlashCopy image copy and sequential format image copies that were generated in the same execution of the COPY utility.
- The previous image copies are sequential format image copies that were generated from a FlashCopy image copy by the COPYTOCOPY utility.

System action

If the COPY statement included the REPORTONLY option, the statistical information report is not generated. If the REPORTONLY option was omitted, a full image copy is taken.

User response

If REPORTONLY was specified, submit another COPY job to take a full image copy.

Severity

4 (warning)

Related concepts
Specifying conditional image copies (Db2 Utilities)

Related reference
Syntax and options of the COPY control statement (Db2 Utilities)
COPY-pending status (Db2 Utilities)

DSNU447I ***csect-name*** **- COPY SHRLEVEL CHANGE OF** ***obj-type obj-qual.obj-name*** **IS NOT ALLOWED BECAUSE IT HAS A LOGGING ATTRIBUTE OF NOT LOGGED**

Explanation

COPY with SHRLEVEL CHANGE was specified for a COPY utility job that refers to an object with a NOT LOGGED logging attribute. This situation is not supported.

System action

Utility processing halts for this object. The utility job completes with a return code of 8.

If the utility job step include an OPTIONS control statement with the EVENT(ITEMERROR,SKIP) option, the utility will process the next item in the list.

User response

Remove the SHRLEVEL CHANGE option from the utility control statement.

Severity

8 (error)

DSNU448I ***csect-name*** **- SCOPE PENDING WAS SPECIFIED, BUT NO OBJECT WITH PENDING STATUS WAS FOUND**

Explanation

SCOPE PENDING was specified for the utility job, however no objects existed in the list with a pending status.

System action

Utility processing continues.

Severity

0 (informational)

DSNU449I ***csect-name*** **- THE NOT LOGGED INDEX *obj-qual.obj-name* IN ICOPY PENDING STATE MUST BE COPIED WITH ITS TABLE SPACE IN THE SAME COPY INVOCATION**

Explanation

A NOT LOGGED index that is in ICOPY pending state must be copied together with its table space in the same COPY invocation. An image copy of such an index made without its table space cannot be used for recovery of the index to a point consistent with its table space because the recovery would require applying log records, which were not written. Therefore, such an image copy is not allowed.

System action

Utility processing halts for this object. The utility job completes with a return code of 8.

If the utility job step includes an OPTIONS control statement with the EVENT(ITEMERROR,SKIP) option, the utility will process the next item in the list.

User response

Include the index's table space in the COPY list.

Severity

8 (error)

DSNU454I ***csect-name*** **COPY MERGE COMPLETE. NUMBER OF COPIES = *iiiii*, NUMBER OF COPIES MERGED = *cccccc*, TOTAL NUMBER OF PAGES MERGED = *ttttt*, ELAPSED TIME = *hh/mm/ss***

Explanation

This message marks the normal completion of the MERGECOPY utility. The variables are:

iiiii
The number of copies found.

cccccc
The number of image copies that were merged. The number merged can be less than the number found if a work data set was not specified using the MERGECOPY WORKDDN option.

ttttt
The total number of pages that were merged.

The merged incremental copies were consolidated either into a single new incremental image copy or into a new full image copy, depending upon the MERGECOPY NEWCOPY option. The Db2 catalog table SYSIBM.SYSCOPY was updated to reflect the results.

This message may indicate that prior data set entries were deleted and, consequently, that backup data set resources were freed.

System action

Processing continues to the next utility statement in the utility job step, if any. If there are no more utility statements, the utility job step is normally terminated, and the resources are released to their prior availability state. The UTILID of the utility job step becomes available for reuse.

User response

You can review the reported statistics to assess the effectiveness of performing incremental image copies. You can examine the SYSIBM.SYSCOPY catalog table to review the incremental and full image copies that are subject to Db2 recovery.

The full or incremental image copy data set identified by the DD statement specified in the COPYDDN option was recorded in SYSIBM.SYSCOPY. Db2 assumes that the image copy data set is now available for subsequent recovery. Ensure that the data set is available for recovery.

Severity

0/4 (informational/warning)

DSNU458I ***csect-name*** **NO IMAGE COPIES TO MERGE**

Explanation

This message is issued in response to a MERGECOPY request. The MERGECOPY utility was invoked to merge existing incremental image copies. However, in checking the Db2 catalog table SYSIBM.SYSCOPY, no incremental image copies were found.

System action

This message indicates the completion of the MERGECOPY utility. Processing continues to the next utility statement in the utility job step, if any. If there are no more utility statements, the utility job step is normally terminated, and the resources that were held become available for REFERENCE processing. The UTILID of the utility job step becomes available for reuse.

The requester may want to determine why the assumption that incremental copies existed was not true.

Operator response

The target copy data set identified by the DD statement nominated by the MERGECOPY COPYDDN option was not required. It was not tracked in the Db2 catalog table SYSIBM.SYSCOPY. It need not be kept for subsequent re-call.

Severity

4 (warning)

A severity 4 condition is given to alert the invoker that processing did not proceed as defined. However, processing is proceeding; nothing was encountered that would invalidate further processing.

DSNU459I **SYSCOPY P RECORD ENCOUNTERED FOR** ***object-type object-qual.object-name*****, PIT RBA =** ***xxxxxx***

Explanation

The utility encountered a SYSCOPY record that contains a 'P' value in the ICTYPE column. This value requires that the SYSCOPY record at the given RBA or LRSN be used.

System action

The utility properly traverses the SYSCOPY records following this SYSCOPY P record.

User response

No action is required.

Severity

0 (informational)

Related concepts

Where to find recovery information (Db2 Administration Guide)

How RBA and LRSN values are displayed (Db2 Administration Guide)

Related tasks

Discarding SYSCOPY and SYSLGRNX records (Db2 Administration Guide)

Related reference

SYSCOPY catalog table (Db2 SQL)

DSNU460I ***csect-name*** **IMAGE COPIES INCONSISTENT. MERGECOPY REQUEST REJECTED**

Explanation

MERGECOPY was requested for an entire table space. However, the most recent image copy for the associated table space was on the data set level. In addition, if the associated table space was partitioned, this might indicate that any or all of its partitions were being reorganized or loaded without logging after the MERGECOPY starting point. The MERGECOPY starting point is the most recent full image copy for the entire table space.

System action

This message indicates the completion of the MERGECOPY utility. Processing continues to the next utility statement in the utility job step, if any. If there are no more utility statements, the utility job step is normally terminated, and the resources that were held become available for REFERENCE processing. The UTILID of the utility job step becomes available for reuse.

No output was produced and the SYSIBM.SYSCOPY catalog table remains unchanged.

User response

A full image copy of the associated table space should be taken. However, if it is preferred that a recovery be done on the data set level, a MERGECOPY job should be submitted by specifying 'DSNUM(data set number)' for each data set for which MERGECOPY is required.

Severity

4 (warning)

A severity 4 condition is given to alert the user that processing did not proceed as defined. However, processing is proceeding; nothing was encountered that would invalidate further processing.

DSNU461I ***csect-name*** **PRIMARY FULL COPY DATA SET NOT FOUND, BACKUP WILL BE USED INSTEAD**

Explanation

The primary full image copy cannot be found. The backup full image copy will be located and used for the merge process.

User response

If the MERGECOPY utility can use the backup full image copy, the utility continues to process. If no backup full image copy can be used, the utility terminates.

Severity

0 (informational)

DSNU462I ***csect-name*** **MERGECOPY DISALLOWED FOR REQUESTED TABLE SPACE**

Explanation

The MERGECOPY utility was requested for table space DSNDB01.DB01, DSNDB01.SYSUTILX, DSNDB06.SYSCOPY, or DSNDB01.SYSDBDXA.

MERGECOPY is not permitted, because only full image copies are allowed on these table spaces that are maintained by Db2. Also, no record of the full image copies exists in the SYSIBM.SYSCOPY catalog table; the copy information is in the Db2 log.

csect-name
The name of the control section that issued the message.

System action

Further utility processing is terminated.

System programmer response

No action is required.

You do not need to merge copies for these table spaces, because no incremental image copies exist.

Severity

8 (error)

Related reference
MERGECOPY (Db2 Utilities)

DSNU463I ***csect*** **- THE** ***xxxxxxx*** **IMAGE COPY DATA SET** ***data-set-name*** **WITH DATE=*dddddd* AND TIME=*tttttt*, IS PARTICIPATING IN MERGECOPY.**

Explanation

This informational message indicates the image copy that is used in the merge process. The variables have the following meanings:

xxxxxxxx
PRIMARY or BACKUP, indicating a primary or backup image copy

data-set-name
The image copy data set name

dddddd
The image copy date

tttttt
The image copy time

User response

The utility continues to process normally.

Severity

0 (informational)

DSNU464I **THIS IS A** ***site-type*****;** ***output-type*** **WITH NEWCOPY NO IS NOT ALLOWED.**

Explanation

The 'NEWCOPY NO' option to create incremental image copies is not supported for the current site. This error might be caused by the following situations:

- Running the MERGECOPY utility at *site-type* LOCALSITE, but selecting the RECOVERYDDN with the 'NEWCOPY NO' option.
- Running the MERGECOPY utility at *site-type* RECOVERYSITE, but selecting the COPYDDN with the 'NEWCOPY NO' option.

System action

The command cannot be executed.

User response

Correct the error and resubmit the job.

Severity

8 (error)

Related concepts

Full or incremental image copy (Db2 Utilities)

Related reference

MERGECOPY (Db2 Utilities)

DSNU470I **TABLESPACE DSNDB01.SYSUTILX, ITS TABLES AND INDEXES CANNOT BE INCLUDED IN A LIST OF OBJECTS.**

Explanation

This message is issued by the running utility when a control statement contains a list of objects, or references a LISTDEF, which includes any of the following SYSUTILX related objects: TABLESPACE DSNDB01.SYSUTILX, INDEXSPACE DSNDB01.DSNLUX01, INDEXSPACE DSNDB01.DSNLUX02, TABLE SYSADM.SYSUTIL, TABLE SYSADM.SYSUTILX, INDEX SYSADM.DSNLUX01 or INDEX SYSADM.DSNLUX02.

System action

The utility job terminates.

User response

Remove the invalid object from the control statement and run the utility against DSNDB01.SYSUTILX, its tables and indexes separately.

Severity

8(error)

DSNU471I ***csect-name* - COPY PENDING ON TABLESPACE *databasename.tablespacename* PROHIBITS PROCESSING**

Explanation

An attempt was made to execute a utility against a table space. Either the table space was in copy pending state or DSNDB06.SYSCOPY was in copy pending state.

System action

Utility processing is terminated.

User response

Remove the table space from the copy pending state and resubmit the job.

Severity

8 (error)

Related tasks

Backing up and recovering your data (Db2 Administration Guide)

DSNU472I ***csect-name* - TABLESPACE *tablespace-name* HAS WRITE ERROR RANGE OR IS IN DEFERRED RESTART.**

Explanation

The attempt to externalize table space 'tablespace-name' pages to the media has failed.

System action

QUIESCE still continues but you cannot make an image copy of the table space. Processing continues for all indexes within the table space and continues to the next table space in the tablespace-list, if any.

User response

Run DISPLAY DATABASE to determine what exception state, if any, would prevent image copy on the table space.

Severity

4 (warning)

Related tasks

Backing up and recovering your data (Db2 Administration Guide)

Deferring restart processing (Db2 Administration Guide)

DSNU473I ***csect-name* - UNABLE TO EXTERNALIZE TABLESPACE *tablespace-name* PAGES**

Explanation

The attempt to externalize pages from the specified table space to the media failed.

csect-name
The name of the control section that issued the message.

tablespace-name
The name of the table space.

System action

The QUIESCE utility continues processing, but the table space cannot be volume-dumped.

Problem determination

The problem might be an I/O error.

Severity

4 (warning)

Related concepts

Reasons why QUIESCE fails to write to disk (Db2 Utilities)

DSNU474I ***csect-name*** **- QUIESCE AT RBA** ***rrrrrrrrrrr*** **AND AT LRSN** ***xxxxxxxxxx***

Explanation

This message displays the log RBA and LRSN at the time of the quiesce. This value is unique for all quiesced table spaces in the list and is recorded in the START_RBA column of the SYSCOPY catalog table entry for each quiesced table space in the list.

System action

Processing continues.

Severity

0 (informational)

Related concepts

How RBA and LRSN values are displayed (Db2 Administration Guide)

DSNU475I ***csect-name*** **- QUIESCE UTILITY COMPLETE, ELAPSED TIME=*tttttt***

Explanation

The message marks the normal completion of the QUIESCE utility. The elapsed clock time that the QUIESCE utility uses is shown by 'tttttt'.

System action

Processing continues to the next utility statement in the utility job step, if any. If there are no more utility statements, the utility job step is normally terminated, and the resources are released to their prior available state. The UTILID of the utility job step becomes available for reuse.

Severity

0 (informational)

DSNU476I ***csect-name*** **- INDEX** ***index-name*** **HAS WRITE ERROR RANGE OR IS IN DEFERRED RESTART**

Explanation

The attempt to externalize index *index-name* pages to the media failed.

System action

QUIESCE processing continues.

User response

Issue the DISPLAY DATABASE command to determine the exception state,

Severity

4 (warning)

Related tasks

Backing up and recovering your data (Db2 Administration Guide)

Deferring restart processing (Db2 Administration Guide)

Related reference

-DISPLAY DATABASE (Db2) (Db2 Commands)

DSNU477I ***csect-name*** **- QUIESCE SUCCESSFUL FOR** ***obj-type obj-qual.obj-name***

Explanation

The QUIESCE for this object was successful. If the object is a table space, then the quiesce for all of its indexes was successful. This message will also be issued for each index with the COPY YES attribute over the quiesced table space. This message will be repeated for every quiesced table space in list.

System action

All data held in the Db2 buffer pool(s) for the table space and its indexes have been written out to the media if no message DSNU473 or DSNU479 were issued earlier. A SYSCOPY record of ICTYPE 'Q' has been recorded in the SYSCOPY catalog table for the table space and for each of its indexes with the COPY YES attribute. The START-RBA value in the SYSCOPY record(s) is the same for all objects quiesced during this invocation of the utility. This RBA/LRSN value will be printed in the message DSNU474 following this message. Processing continues to the next table space in the table space list, if any.

Severity

0 (informational)

DSNU478I ***csect-name*** **- INDEX** ***index-name*** **HAS PENDING STATE**

Explanation

The specified index is in a pending state. This message is repeated for all indexes in a pending state.

csect-name
The name of the control section that issued the message.

index-name
The index name.

System action

The QUIESCE utility stops processing but continues to check all table spaces and indexes for any additional table space or index that has a pending state. The SYSCOPY table is not updated for any table space in the list.

User response

Issue the DISPLAY DATABASE command to look at the utility status byte in the DBA table for a specified pending state.

Severity

8 (error)

Related tasks
Backing up and recovering your data (Db2 Administration Guide)
Related reference
Advisory or restrictive states (Db2 Utilities)
-DISPLAY DATABASE (Db2) (Db2 Commands)

DSNU479I ***csect-name*** **- UNABLE TO EXTERNALIZE INDEX** ***index-name*** **PAGES**

Explanation

The attempt to externalize index 'index-name' pages to the media has failed.

System action

QUIESCE still continues but the table space cannot be volume-dumped.

Problem determination

The problem may be an I/O error.

Severity

4 (warning)

DSNU480I ***csect-name*** **- UNABLE TO EXTERNALIZE TABLESPACE** ***tablespace-name*** **PARTITION** ***partition-number*** **PAGES**

Explanation

The attempt to externalize TABLESPACE 'tablespace-name' PARTITION 'partition-number' pages to the media failed.

System action

QUIESCE still continues, but the table space cannot be volume-dumped.

Problem determination

The problem might be an I/O error.

Severity

4 (warning)

DSNU481I ***csect-name*** **- QUIESCE SUCCESSFUL FOR** ***obj-type obj-qual.obj-name*** **PARTITION** ***partition***

Explanation

The QUIESCE for PARTITION 'partition-number' of this object was successful. If the object is a table space partition, then the quiesce for all of its indexes was successful. This message will also be issued for each index with the COPY YES attribute over the quiesced table space. This message is repeated for every quiesced table space in the list.

System action

All data held in the Db2 buffer pool(s) for the table space and its indexes have been written out to the media if message DSNU480 or DSNU482 was not issued earlier. A SYSCOPY record of ICTYPE 'Q' was recorded in the SYSCOPY catalog table for the table space and for each of its indexes with the COPY YES attribute. The START-RBA value in this SYSCOPY record is the same for all objects quiesced during this invocation of the utility. This RBA value is printed in message DSNU474 following this message. Processing continues to the next table space in the table space list, if any.

Severity

0 (informational)

DSNU482I ***csect-name*** **- UNABLE TO EXTERNALIZE INDEX** ***index-name*** **PARTITION** ***partition-number*** **PAGES**

Explanation

The attempt to externalize index 'index-name' 'partition-number' pages to the media failed.

System action

QUIESCE still continues, but the table space cannot be volume-dumped.

Problem determination

The problem might be an I/O error.

Severity

4 (warning)

DSNU483I ***csect-name*** **- TABLESPACE** ***tablespace-name*** **PARTITION** ***partition-number*** **HAS WRITE ERROR RANGE OR IS IN DEFERRED RESTART.**

Explanation

The attempt to externalize table space *tablespace-name* partition *partition-number* pages to the media failed.

System action

QUIESCE still continues, but you cannot make an image copy of the table space or partition. Processing continues for the index partition and all nonpartitioned indexes within the table space, and then proceeds to the next table space in the table space list, if any.

User response

Issue DISPLAY DATABASE to determine what exception state, if any, would prevent image copy on the table space or partition.

Severity

4 (warning)

Related tasks

Backing up and recovering your data (Db2 Administration Guide)

Deferring restart processing (Db2 Administration Guide)

DSNU484I ***csect-name*** **- INDEX** ***index-name*** **PARTITION** ***partition-number*** **HAS WRITE ERROR RANGE OR IS IN DEFERRED RESTART**

Explanation

The attempt to externalize index *index-name* pages partition *partition-number* pages to the media failed.

System action

QUIESCE processing continues.

User response

Issue DISPLAY DATABASE to determine the exception state.

Problem determination

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data). for a discussion of the database recovery function.

Severity

4 (warning)

DSNU485I ***csect-name*** **QUIESCE WRITE(NO) REQUESTED ON** ***obj-type obj-qual.obj-name*** **WHICH HAS THE NOT LOGGED ATTRIBUTE**

Explanation

QUIESCE with the WRITE(NO) option was requested on an object with the NOT LOGGED attribute. Invoking QUIESCE WRITE(NO) on an object with the NOT LOGGED attribute does not create a recoverable point and does not write the pages from the buffer pool to DASD.

System action

The object will be skipped by QUIESCE, and the other objects in the list are processed.

User response

If you want a quiesced point for the object, complete the following steps:

- Alter the table space to have the LOGGED attribute.
- Take a full image copy.
- Rerun QUIESCE.

Severity

0 (informational)

DSNU500I ***csect-name*** **RECOVERY COMPLETE, ELAPSED TIME =** ***hh/mm/ss***

Explanation

This message is issued at the normal completion of the RECOVER utility. The time that elapsed since the beginning of the RECOVER utility to its completion was 'hh' hours, 'mm' minutes, and 'ss' seconds.

System action

This message indicates the normal completion of the RECOVER utility. Processing continues to the next utility statement in the utility job step, if any. If not, the utility job step is normally terminated, and the resources held become available for further processing. The UTILID of the utility job step becomes available for reuse.

Operator response

The recovered resources are available for further processing.

User response

The recovered data is now available for further processing.

Severity

0/4 (informational/warning)

DSNU501I ***csect-name*** **A PAGE HAS BEEN STOPPED DURING** ***utility-name*****. SEE PREVIOUS DSNI012 MESSAGE**

Explanation

The utility completed normally, but the data manager subcomponent cannot apply all of the log records because the Db2 is inconsistent.

csect-name
The name of the control section that issued the message.

utility-name
The name of the utility: RECOVER or FLASHCOPY WITH CONSISTENCY.

System action

The data manager subcomponent marked the pages that are identified in message the preceding DSNI012 message as broken. All other pages were recovered successfully. Log apply was stopped at the point of the inconsistency in the Db2 log for that page.

User response

Use the REPAIR utility to apply changes that should have been made by the log record that is in error.

If you were recovering to the current point in time, use the RECOVER utility, specifying `'PAGE(`*page-number*`) CONTINUE'`, where *page-number* is the page number of the page where the inconsistency was found. Db2 will retrieve the page from disk and apply log records starting after the inconsistent one.

Severity

8 (error)

Related concepts
FlashCopy image copies (Db2 Utilities)
Related reference
RECOVER (Db2 Utilities)
REPAIR (Db2 Utilities)
Related information
DSNH012I
W *csectname* LINE *nnnn* COL *cc* INVALID CONTINUATION

DSNU502I ***csect-name*** **PAGE** ***page number*** **WAS NOT FOUND IN ANY IMAGE COPY DATA SET**

Explanation

The page specified for 'RECOVER page' was not found in any image copy data sets.

This is an informational message only. It does not indicate termination of processing.

System action

The RECOVER utility continues processing. The assumption is that the page was inserted after the last image copy was made. The page is reset and recovered from the log, starting at the log RBA recorded in the SYSCOPY record for the last image copy data set.

Severity

0 (informational)

DSNU503I ***csect-name*** **PAGE** ***page-number*** **IS WITHIN PHYSICAL ERROR RANGE**

Explanation

The page specified for 'RECOVER page' is within the physical error range of the table space partition, index space partition, or data set. 'RECOVER page' cannot be effective in this case, because the page would still be

within the physical error range and therefore inaccessible to the user.

System action

The RECOVER utility terminates with return code 8. No changes are made to the table space.

User response

Resubmit the RECOVER utility specifying 'error range'.

Severity

8 (error)

DSNU504I ***csect-name*** **MERGE STATISTICS FOR** ***obj-type obj-qual.obj-name*** **- NUMBER OF COPIES =** ***cc*****, NUMBER OF PAGES MERGED =** ***nnnnnn*****, ELAPSED TIME =** ***hh/mm/ss***

Explanation

This message is issued at the completion of the MERGE process for the MERGECOPY or RECOVER utility. The message indicates the number of image copies currently processed ('cc') and the total number of pages that were merged ('nnnnnn'). The same page can be obtained from more than one incremental image copy. MERGE is repeated for MERGECOPY if all of the input image copy data sets cannot be allocated and a temporary work data set has been specified.

For the RECOVER utility, MERGE is executed whether or not there are incremental image copies participating. In this case, the number of copies ('cc') is one.

The elapsed time of the MERGE is 'hh/mm/ss', hours, minutes, and seconds, respectively.

System action

The MERGECOPY or RECOVER utility continues processing; this message is for information only.

User response

The statistics are indicative of the processing required. For MERGECOPY, it could indicate that next time more input image copy data sets should be allocated. For example, if there was more than one MERGE pass then this message will be issued more than once. For both MERGECOPY and RECOVER, it could indicate that more frequent invocation of MERGECOPY is appropriate.

DSNU505I ***csect-name*** **PAGE** ***page-number*** **IS BEYOND END OF** ***obj-type***

Explanation

A page number was found to be beyond the end of the table space, index space, or the current data set.

System action

The RECOVER utility terminates with ABEND 04E reason code 00E40100. If RECOVER PAGE was specified, then the utility terminates with return code 8 and no changes are made to the object.

User response

Check that the image copy data set(s) in use during the RECOVER contain valid pages. If running RECOVER with the PAGE option, then resubmit the utility with the correct page specified.

Severity

8 (error)

DSNU506I ***csect-name*** **TABLESPACE** ***obj-qualifier.obj-name*** **DSNUM** ***dsnum*** **IS IN REORG PENDING STATE**

Explanation

This message is issued at completion of a utility when an object has the REORP state set.

The utility can set the REORP state if the table space contains a table that includes an identity column. It can also set the REORP state when a partitioned table space, which has had its limiting keys altered, is recovered to a point in time.

System action

The utility continues processing.

Severity

0 (informational)

DSNU507I ***csect-name*** **NO USABLE BACKUP FOR RECOVER**

Explanation

The RECOVER utility determined that a backup was required but not found. The utility encountered one of the following situations:

- An error occurred while processing the oldest available full image copy data set. This might be the only full image copy data set available.
- While scanning backward through the SYSCOPY table, a LOAD LOG(NO) or REORG log(NO) record type was found.

Any of the following is acceptable as a backup:

- A full image copy.
- A LOAD LOG(YES).
- A REORG LOG(YES).
- For RECOVER PAGE, an incremental image copy that contains the specified page.
- A 'no record found' return from the first request for a SYSCOPY record indicates that the object was entirely populated by 'inserts'. The object will be recovered from the Db2 log if its entire history lies within the scope of the log, that is, archive log data sets containing updates for the object have not been deleted.

System action

The RECOVER utility terminates.

User response

Re-create the object that was to be recovered.

Severity

8 (error)

DSNU508I ***csect-name*** **IN FALL BACK PROCESSING TO PRIOR FULL IMAGE COPY**

Explanation

One of the following occurred:

- The RECOVER utility could not allocate the most recent full image copy data set. The prior full image copy is used.

  Accompanying messages indicate why the image copy data set could not be allocated.
- PAGE or ERROR RANGE was specified and the recoverable point identified an image copy that was created by the DFSMSdss DUMP command with the CONCURRENT option. Such an image copy cannot be used to process PAGE or ERROR RANGE. A prior recoverable point is located.

System action

The RECOVER utility continues processing, searching for the prior image copy.

DSNU509I ***csect-name*** **- NO ERROR RANGE TO RECOVER**

Explanation

The RECOVER utility was invoked to recover the existing ERROR RANGE. However, no ERROR RANGE was found.

System action

This message indicates the completion of the RECOVER ERROR RANGE utility. Processing continues to the next utility statement in the utility job step. If there are no more utility statements, the utility job step is normally terminated.

Severity

4 (warning)

DSNU510I **NO RECOVERY BASE AVAILABLE FOR RECOVERY OF** ***obj-type obj-qual.obj-name***

Explanation

It is not possible to locate a good recovery base. A recovery base could be either a full image copy or a system-level backup. If you only take image copies, the following conditions are possible:

- No back level image copy exists, or
- An I/O error occurred while reading the back level image copies, or
- Db2 was unable to locate a suitable image copy

The return code that accompanies this message is 0 (informational) or 8 (error) under the following conditions:

0 (informational)
A full image copy is not found in the SYSCOPY table during RECOVER initialization or during fall back processing or if YES was specified for the value of the SYSTEM_LEVEL_BACKUPS subsystem parameter and a system-level backup was not chosen by RECOVER as a recovery base. However, a LOG(YES) event was detected and recovery continues from the log. Note that if you have performed a REORG after your last image copy or system-level backup, then the image copy of system-level backup will not be chosen as the recovery base.

8 (error)
The RECOVER utility is in fallback mode and no base recoverable point (a full image copy or LOG(YES) event) was found in the SYSCOPY table. Further utility processing is terminated.

System action

If the return code is 0, processing continues. If the return code is 8, further utility processing is terminated.

System programmer response

If the return code is 8 and the object being recovered is a table space, the data must be repaired so that a backup can be taken.

User response

Notify the system programmer if the return code is 8. If the return code is 0, no action is required.

Severity

0 (informational) or 8 (error)

Related concepts

Point-in-time recovery using the RECOVER utility (Db2 Administration Guide)

Related tasks

Backing up and recovering your data (Db2 Administration Guide)

Related reference

RECOVER (Db2 Utilities)

SYSTEM-LEVEL BACKUPS field (SYSTEM_LEVEL_BACKUPS subsystem parameter) (Db2 Installation and Migration)

DSNU511I ***csect-name*** **RECOVERY INFORMATION INDICATES THAT** ***obj-type obj-qual.obj-name*** **IS NOT IN A RECOVERABLE STATE**

Explanation

The requested recovery of an object would result in recovery entirely from the log. Because the object is also in copy pending status, recovery might fail in log apply in these situations:

- A previous MODIFY utility job deleted the last recoverable point indicated in the SYSCOPY catalog table.
- A previous MODIFY utility job deleted all SYSCOPY entries.

In either case, the MODIFY utility leaves the object in copy pending status and the RECOVER utility is unable to determine the reliability of recovery from the log.

System action

The RECOVER utility terminates with return code 8.

User response

Determine the recoverability status of the object. SYSCOPY information is probably not useful as no recoverable point (FULL IMAGE COPY, REORG LOG(YES) or LOAD REPLACE LOG(YES)) was found by the RECOVER utility. User information might be the only indication about recoverability.

To allow RECOVER to execute, copy pending status must be turned off. It is safest to make a full image copy before attempting the recovery. Then run the RECOVER utility with the TORBA or TOLOGPOINT option.

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

Severity

8 (error)

DSNU512I ***csect-name*** **DATA SET LEVEL RECOVERY IS REQUIRED FOR** ***obj-type obj-qual.obj-name***

Explanation

Recovery was requested for an entire object. However, an image copy exists for a specific data set that is associated with the object. Hence, the object must be recovered by data set.

csect-name
The name of the control section that issued the message.

obj-type
The type of object.

obj-qual.obj-name
The qualified name of the object.

System action

RECOVER completes unsuccessfully with a return code of 8.

User response

Terminate the current RECOVER job. Then, submit a RECOVER job with the DSNUM(*data set number*) option for each data set for which recovery is required.

Severity

8 (error)

Related tasks

Recovering a data set or partition (Db2 Utilities)

Related reference

Syntax and options of the RECOVER control statement (Db2 Utilities)

DSNU513I *csect-name utility-name* UTILITY LOG APPLY RANGE IS RBA *rba-start* LRSN *lrsn-start* TO RBA *rba-end* LRSN *lrsn-end*

Explanation

This message is issued one or more times to display the entire log range before applying updates.

csect-name
The name of the control section that issued the message.

utility-name
The name of the utility: RECOVER or FLASHCOPY WITH CONSISTENCY.

rba-start* and *rba-end
The beginning and end of the RBA range.

These values are zero in a data sharing environment for the catalog and directory objects that do not have DSNDB01.SYSLGRNX entries. (For a list of catalog and directory objects that do not have DSNDB01.SYSLGRNX entries, see the information about point-in-time recovery of the catalog and directory.)

lrsn-start* and *lrsn-end
The beginning and end of the LRSN range.

The RBA and LRSN range values are equal in a non-data sharing environment.

System action

Processing continues.

User response

No action is required.

Severity

0 (informational)

Related concepts

FlashCopy image copies (Db2 Utilities)

Point-in-time recovery of the catalog, directory, and all user objects (Db2 Utilities)

How RBA and LRSN values are displayed (Db2 Administration Guide)

Related reference

RECOVER (Db2 Utilities)

DSNU514I *csect-name* RECOVERY DATA DOES NOT PERMIT DSNUM(ALL) RECOVERY OF *obj-type obj-qual.obj-name*

Explanation

Recovery was requested for an entire object. If the object is a table space, then the latest activity on the entire table space was a REORG LOG (NO) or a LOAD LOG (NO). If the object is an index space, then the latest activity on the entire index space was a REORG INDEX or REBUILD INDEX. If full image copies have been taken at the data set level since then, recover the object on the data set level.

System action

RECOVER completes unsuccessfully with a return code of 8.

User response

Submit a recover job by specifying DSNUM (data set number) for each data set requiring recovery. If the object is an index space, then the REBUILD INDEX utility may be used to rebuild the index.

Severity

8 (error)

Related reference

RECOVER (Db2 Utilities)

The LOG option of the LOAD or REORG utilities (Db2 Administration Guide)

REBUILD INDEX (Db2 Utilities)

REORG INDEX (Db2 Utilities)

DSNU515I *csect-name* THE IMAGE COPY DATA SET *dsn* WITH DATE=*date* AND TIME=*time* IS PARTICIPATING IN RECOVERY OF *obj-type obj-qual.obj-name*

Explanation

This message is issued by the RECOVER utility for each participating image copy data set before it opens the

data set and begins the restore process. If an error occurs while processing, the utility searches for a new recoverable base.

This message is routed to SYSOUT.

System action

RECOVER processing continues.

User response

No action is required.

Severity

0 (informational)

Related concepts

Events that occur during recovery (Db2 Administration Guide)

Related reference

RECOVER (Db2 Utilities)

DSNU516I **NO BACKUP WAS TAKEN AFTER LOAD, REORG OR CHECK DATA LOG(NO) OF *obj-type obj-qual.obj-name***

Explanation

Recovery was requested for a data set of an object. If the object is a table space, then a system-level backup or full image copy was not taken after or during a LOAD, REORG, or CHECK DATA without logging. The table space is in an unrecoverable state. If the object is an index space, then a full image copy or system-level backup was not taken after a REORG INDEX or REBUILD INDEX.

System action

The RECOVER utility completes unsuccessfully with a return code of 8.

System programmer response

The data should be repaired before a full image copy or system-level backup is taken. The recovery information for the object (use the REPORT RECOVERY utility) should be scrutinized.

User response

If the object is a table space, the data set is in an unrecoverable state. If the object is an index space, then the REBUILD INDEX utility may be used to rebuild the index. Notify the system programmer for corrective action.

Severity

8 (error)

Related concepts

Point-in-time recovery using the RECOVER utility (Db2 Administration Guide)

How to report recovery information (Db2 Administration Guide)

Related tasks

Backing up and recovering your data (Db2 Administration Guide)

Related reference

RECOVER (Db2 Utilities)

REBUILD INDEX (Db2 Utilities)

REPORT (Db2 Utilities)

DSNU517I ***csect-name* - SYSCOPY RECORD DELETED BY MODIFY UTILITY. DSN=*dsn*, VOL=SER=*nnn*, FILESEQNO=*fff***

Explanation

This message is repeated for each volume of a multivolume data set that is deleted.

The variables have the following meanings:

dsn
The name of the image copy data set whose record was removed from the SYSCOPY table by the MODIFY utility.

nnn
The serial number of the volume containing the data set.

fff
The tape file sequence number. It will be zero for DASD data sets.

System action

The MODIFY utility continues its termination processing.

System programmer response

Because Db2 no longer has any knowledge of the image copy data set, you may delete it and reuse the space. If the last full image copy was deleted, ensure that another one is taken as soon as possible.

Severity

0 (informational)

DSNU518I ***csect-name object-type object-qualifier.object-name* CONTAINS**

BROKEN PAGE *page-number*, ERROR CODE *error*

Explanation

A broken page, *page number*, was detected during execution of an image copy utility job. The copy step is terminated and the broken page is not copied to the output data set.

System action

COPY utility ends with a return code of 8.

System programmer response

Use either the RECOVER, RECOVER PAGE, or REPAIR utility to correct the broken page. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

User response

The associated data set has not been copied. If the object is in the COPY-pending status, it is in an unrecoverable state. Notify the system programmer for corrective action.

Severity

8 (error)

Related concepts

Recovery of page sets and data sets (Db2 Administration Guide)

Recovering a page (Db2 Utilities)

Related tasks

Repairing a damaged page (Db2 Utilities)

Related reference

RECOVER (Db2 Utilities)

REPAIR (Db2 Utilities)

DSNU519I ***csect-name* TOCOPY DATA SET NOT FOUND**

Explanation

The data set specified with the keywords TOCOPY, TOVOLUME, or TOSEQNO cannot be found in the SYSCOPY table for the object to be recovered.

This may be caused by a mismatch in granularities. If the RECOVER specifies a particular DSNUM, the data set specified with the TOCOPY keyword may be for an image copy of this DSNUM or of the entire table space or index space. However, if the RECOVER is for the entire table space or index space, the specified data set must be for an image copy of the entire table space or index space.

This message may also be issued if TOVOLUME is specified for a cataloged data set.

RECOVER TOCOPY can issue DSNU519I even if the data set information was correct but the data set was not for this site. For example, if the Db2 subsystem is specified as LOCALSITE, but the TOCOPY data set information is for a RECOVERYSITE data set, this message will be issued.

System action

RECOVER processing is terminated.

User response

Correct the input and resubmit the RECOVER job.

Severity

8 (error)

DSNU520I ***csect-name* RECOVER TO A PRIOR POINT IN TIME MIGHT LEAVE TABLE SPACE *table-space-name* INCONSISTENT**

Explanation

RECOVER DSNUM to a previous point in time (for example, using the TOLOGPOINT option) was specified for a nonpartitioned table space. You might have recovered a data set that has different compression characteristics than the replaced data set. For example, the data set to which you recovered might have been compressed with a different dictionary.

System action

Processing continues.

User response

The table space might be in an inconsistent state. If the dictionary was not built with the data set that was just recovered, the results are unpredictable and might jeopardize all the data in the entire table space.

Recover all of the data sets in the table space to the same point in time. Do not ignore this message unless all data sets in this table space were recovered to the same point in time. Otherwise, the state of this nonpartitioned table space is inconsistent and unpredictable.

Severity

4 (warning)

DSNU521I ***csect-name*** **- RECOVER UTILITY FAILED. UNABLE TO READ REQUIRED LOG RECORDS.**

Explanation

Recovery was requested for a table space, index space, or data set. An attempt was made to apply changes from the Db2 log, but the necessary log records could not be read from the log data set. This message is accompanied by message DSNI007I.

System action

The RECOVER utility completes unsuccessfully with return code 8.

Operator response

Provide the console listing of the DSNI007I message for the system programmer.

System programmer response

Run the print log map (DSNJU004) utility. Find the data set that contains the requested RBA or LRSN from the output of the utility.

User response

Consult the system programmer for corrective action.

Problem determination

If no listed data set contains the required RBA or LRSN, one of the following might have occurred:

- The data set was deleted from the bootstrap data set (BSDS) by the change log inventory (DSNJU003) utility. Rerun the utility to insert the missing data set name. Db2 must be stopped to run this utility.
- The BSDS was damaged. The BSDS can be restored using the dump and the most recent archive log data set. Run the change log inventory (DSNJU003) tility to supply changes that occurred during and after the last offload operation. Changes can be determined from the operator's console listing.

If a listed log data set contains the required RBA or LRSN, this message is preceded by one or more DSNJxxx error messages. See the explanation of those messages for the appropriate action.

Severity

8 (error)

DSNU522I ***csect-name*** **RECOVER CANNOT PROCEED FOR** ***obj-type obj-qual.obj-name*** **BECAUSE A NON-RECOVERABLE EVENT HAS BEEN ENCOUNTERED FROM SYSIBM.SYSCOPY WHICH HAS DBNAME=*dbname* TSNAME=*tsname* DSNUM=*dsnum* ICTYPE=*ictype* START_RBA=X'*rba*'**

Explanation

Recovery was requested for an index, but activity on its table space (identified by the SYSIBM.SYSCOPY columns) prohibits recovery. The use of an index's full image copy by recovery is prohibited by a REORG or LOAD on its underlying table space.

System action

Utility processing is terminated. All objects in the RECOVER statement are left in the same state as before the RECOVER utility was invoked.

User response

Use the REBUILD INDEX utility to rebuild the index from the table space. For more information about the recoverability of this index, run the REPORT RECOVERY utility on both the index and its table space.

Severity

8 (error)

Related concepts

How RBA and LRSN values are displayed (Db2 Administration Guide)

DSNU523I **RECOVER UTILITY FAILED. NO RECOVERY BASE WAS AVAILABLE AND THE FIRST LOG RECORD WAS NOT THE REQUIRED INITIALIZATION RECORD**

Explanation

RECOVER was requested for a table space or a data set of a table space and no image copy or system-level backup was available. Recovery was attempted from the log and failed due to missing data set initialization records. Specifically, the log records which format space map and header pages were missing.

System action

RECOVER completes unsuccessfully with a return code of 8.

System programmer response

Use the problem determination information given below to determine if a user error has occurred. If possible, correct the error and resubmit the RECOVER utility job for this table space or data set. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data). for a discussion of possible recovery procedures.

User response

The associated data set has been reset to an empty state. Notify system programmer for corrective action.

Problem determination

This message was preceded by message DSNU513I which identifies the log RBA range being applied. Run the print log map (DSNJU004) utility for the table space in question over the indicated log RBA range.

This will show what log records are present and may assist in determining if a log data set has been damaged or deleted, or if the BSDS has been damaged. If damage to table space DSNDB01.SYSLGRNX is suspected, recover it and attempt the earlier failing recovery again.

Severity

8 (error)

DSNU524I ***csect-name* INVALID DATA SET OR PARTITION NUMBER *partition-number* SPECIFIED FOR *object-type object-qualifier.object-name***

Explanation

An invalid number was specified for the data set or partition of the object named in the utility statement.

System action

Further utility processing terminates.

User response

Correct the data set/partition number, or verify that the object name is specified correctly. Then resubmit the utility statement in a new utility job step.

Severity

8 (error)

Related concepts

Db2 online utilities (Db2 Utilities)

Db2 stand-alone utilities (Db2 Utilities)

DSNU525I ***csect-name* RECOVERY DATA DOES NOT PERMIT DSNUM(ALL) RECOVERY OF *obj-type obj-qual.obj-name***

Explanation

Recovery was requested for an entire object. However, the object is not recoverable at that level for one of the following reasons:

- The object was recovered to a point in time (for example, TOLOGPOINT was specified), which required fall back processing. However, no subsequent image copy was taken to establish a base for recovery.
- A partition of the object was recovered to a point in time after the last full image copy of the object was taken.

  Recovery to the current state at the table space level is not allowed after one or more empty partitions are dropped during REORG TABLESPACE on a partition-by-growth table space. Until a full image copy at the table space level has been performed, partition-level recoveries (DSNUM *integer*) need to be done instead.

System action

The RECOVER utility completes unsuccessfully with return code 8.

User response

Submit the RECOVER job with DSNUM specified for each data set for which recovery is required.

Severity

8 (error)

Related reference

Syntax and options of the RECOVER control statement (Db2 Utilities)

DSNU526I **NO BACKUP WAS TAKEN AFTER PARTIAL RECOVERY OF *obj-type objqual. obj-name***

Explanation

Recovery was requested for a data set of an object. However, an earlier point-in-time recovery (for example, using the TOLOGPOINT option) was specified and no subsequent image copy or system-level backup was taken to establish a base for recovery.

System action

The RECOVER utility completes unsuccessfully with return code 8.

System programmer response

You can use the RECOVER utility with the TOCOPY, TORBA, or TOLOGPOINT option to force recovery to an earlier point in time. You can use the DSN1COPY utility to restore the data set to an earlier image copy. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data). for a discussion of database recovery procedures.

User response

The associated data set is in a nonrecoverable state. Consult the system programmer for corrective action.

Severity

8 (error)

DSNU527I ***csect-name*** **DB2 OBJECT RECOVERED TO AN INDETERMINATE POINT**

Explanation

The image copy data set specified with the TOCOPY keyword of the RECOVER utility was one of the following:

- An image copy data set made with the SHRLEVEL CHANGE option. In this mode, changes might have been made to the object while image copy was in progress. If a change was made to a page before image copy processed the page, the update will be in the copy data set. If a change was made to a page after image copy processed it, the change will not appear in the copy data set. The data set may contain partial updates from some transactions.
- An image copy data set made during the LOAD REPLACE utility. An image copy produced during LOAD REPLACE will not contain updates made to the table space to correct unique index violations during the INDEXVAL phase or referential constraint violations during the ENFORCE phase. Therefore, it is not recommended as a recovery point.

If the object recovered is a table space, then indexes on the table space are placed in rebuild pending status and dependent table spaces, if any, are placed in check pending status. The indexes placed in rebuild pending are identified by message DSNU831I, and the dependent table spaces placed in check pending are identified by message DSNU563I.

System action

The utility terminates normally.

User response

Based on the explanation above, determine if the recovery is satisfactory. Rebuild the indexes identified by message DSNU557I in the job output. Run CHECK DATA on the table spaces identified by message DSNU563I to correct any referential constraint violations.

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data). for a discussion of database recovery procedures.

Severity

4 (warning)

DSNU528I **NO FULL IMAGE COPY WAS AVAILABLE AND THERE ARE NO UPDATES TO APPLY FROM THE DB2 LOG FOR TABLESPACE** ***tablespace-name*** **DSNUM** ***dsnum***

Explanation

Recovery was requested for a table space or a data set of a table space and no image copy or system-level backup was available. Recovery was attempted from the log, but no log records were applied because no SYSLGRNX records that correspond to the recovery scope were found.

tablespace-name
The name of the table space for which recovery was requested.

dsnum
Identifies the partition or data set that is to be recovered. If *dsnum* is 0, recovery was requested for the entire table space.

System action

The associated data set was reset to an empty state, and the data set was placed in RECOVER-pending status.

If RECOVER was processing a list of table spaces, only the associated data set was reset to an empty state. However, all data sets in the list were placed in RECOVER-pending status.

System programmer response

Use the information in the problem determination section to determine whether a user error occurred.

Correct the error and resubmit the RECOVER utility for the table space.

User response

If the TORBA or TOLOGPOINT option was specified, use the information in the problem determination section to verify that the value is a valid RBA or LRSN. Correct the error and resubmit the RECOVER utility for the table space.

Problem determination

Run the REPORT RECOVERY utility for the table space at the appropriate table space or data set level (DSNUM). The output shows the recovery points (SYSCOPY records) and the update log ranges (SYSLGRNX records) that exist for the table space.

If you take system-level backups with the BACKUP SYSTEM utility, run the Print Log Map (DSNJU004) utility to print the system-level backup information. If you use data sharing, ensure that the system-level backup information from all members is gathered. Locate the system-level backup information in the DSNJU004 output and compare it with the output from the REPORT RECOVERY utility output.

Severity

8 (error)

Related reference

RECOVER (Db2 Utilities)
RECOVER-pending status (Db2 Utilities)
SYSLGRNX table (Db2 SQL)

DSNU529I ***csect-name*** **INVALID SPECIFICATION OF TORBA =** ***xxx***

Explanation

'xxx' is the log RBA specified for the RECOVER utility TORBA keyword. The RBA is not within the scope of the log.

System action

The RECOVER utility terminates with a return code of 8 without making any changes to the object to be recovered.

User response

Correct the input and resubmit the job. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data). for a discussion of database recovery procedures.

Problem determination

The listing produced by the print log map (DSNJU004) utility will show the current extent of the Db2 log.

Severity

8 (error)

Related concepts

How RBA and LRSN values are displayed (Db2 Administration Guide)

DSNU530I ***csect-name*** **- MULTIPLE DATA SETS FOUND FOR THE COPY DATA SET SPECIFICATION**

Explanation

Db2 issues this message during the RECOVER or COPYTOCOPY utility when the specification of the input image copy data set is ambiguous and does not uniquely identify an image copy. Multiple image copies were found in SYSIBM.SYSCOPY for the object with the same data set name.

System action

Processing halts for this object.

RECOVER completes unsuccessfully with a return code of 8.

For the COPYTOCOPY utility, if the utility job step includes an OPTIONS control statement with the EVENT(ITEMERROR,SKIP) option, the utility will process the next item in the list.

User response

Two or more DSNU531I messages will follow this message providing more information about each duplicate data set. Select the correct data set from the DSNU531I messages.

Rerun the RECOVER job, specifying a unique combination of TOVOLUME and TOSEQNO.

Rerun the COPYTOCOPY job, specifying an unique combination of FROMVOLUME and FROMSEQ.

Severity

8 (error)

DSNU531I ***csect-name*** **-** ***dsn*** **EXISTS WITH - VOLUME=*vol*, FILE SEQUENCE NUMBER=*fseq*, RBA=*rba*, DATE=*date*, TIME=*time***

Explanation

Db2 issues this message two or more times to document the duplicate data sets detected by the RECOVER utility during TOCOPY processing, or by the COPYTOCOPY utility during FROMCOPY processing. See the explanation for message DSNU530I.

System action

RECOVER completes unsuccessfully with a return code of 8.

For COPYTOCOPY, if the utility job step includes an OPTIONS control statement with the EVENT(ITEMERROR,SKIP) option, the next item in the list will be processed.

User response

Use the information provided in all of the DSNU531I messages to determine the correct data set for this recovery. 'rba', 'date' and 'time' are provided for each data set to assist in the selection. The DSNU531I message for the data set you select will provide the correct 'vol' and 'fseq' values to be specified on the TOVOLUME and TOSEQNO keywords respectively.

Rerun the RECOVER job specifying TOCOPY and TOVOLUME(vol-ser). Include the TOSEQNO(fseq) keyword if it is necessary to distinguish an unique data set.

Rerun the COPYTOCOPY job specifying FROMCOPY and FROMVOLUME(vol-ser). Include the FROMSEQNO(fseq) keyword if it is necessary to distinguish a unique data set.

Severity

8 (error)

Related concepts

How RBA and LRSN values are displayed (Db2 Administration Guide)

DSNU532I ***csect-name* - RECOVER *obj-type obj-qual.obj-name* START**

Explanation

This message is issued when there is more than one object in the list. It indicates that the recover of a particular object is starting. If the PARALLEL keyword has been specified, then the restore phase messages for different objects in the list may be intermingled.

This message is routed to SYSPRINT.

System action

RECOVER processing continues.

Severity

0 (informational)

DSNU533I ***csect-name* - *obj-type obj-qual.obj-name* IS A DUPLICATE OF *obj-type obj-qual.obj-name***

Explanation

The utility found a duplicate object in the list. The object name may indicate a partition or piece number.

System action

The utility job terminates processing.

User response

Correct the object list. Resubmit the job if needed.

Severity

8 (error)

DSNU534I ***csect-name* TARGET RECOVERY POINT IS NOT A QUIESCE POINT**

Explanation

The RECOVER utility attempted to recover to a point in time, but one of the following conditions was detected:

- The table space set is not being recovered to a quiesce point or to a set of image copies that were taken with SHRLEVEL REFERENCE.
- Not all table spaces in the table space set have the same quiesce point.
- A table space in the table space set contains a dependent table with a referential constraint that was defined after the specified quiesce point.

A *table space set* is a group of related table spaces. It includes a table space and the following related table spaces:

- Any referentially related table spaces
- Any associated auxiliary LOB or XML table spaces
- If the table space contains an archive-enabled table, the table space that contains the associated archive table

csect-name
The name of the control section that issued the message.

User response

If possible, recover the table space set to a quiesce point or to a set of image copies that were taken with SHRLEVEL REFERENCE. Otherwise, use the CHECK

DATA utility to check and correct referential violations. Use the CHECK DATA utility on the base table space and the CHECK LOB utility on any LOB table spaces to validate the LOB columns.

Severity

4 (warning)

Related concepts

Common quiesce points (Db2 Utilities)
Point-in-time recovery (Db2 Utilities)
Creation of relationships with referential constraints (Introduction to Db2 for z/OS)
LOB table spaces (Db2 Administration Guide)
XML table spaces (Db2 Administration Guide)
Archive-enabled tables and archive tables (Introduction to Db2 for z/OS)

Related reference

CHECK DATA (Db2 Utilities)
CHECK LOB (Db2 Utilities)

DSNU535I *csect-name* - FOLLOWING TABLESPACES RECOVERED TO A CONSISTENT POINT

Explanation

The RECOVER utility recovered a table space set to a quiesce point or to a set of image copies that were taken with SHRLEVEL REFERENCE.

A *table space set* is a group of related table spaces. It includes a table space and the following related table spaces:

- Any referentially related table spaces
- Any associated auxiliary LOB or XML table spaces
- If the table space contains an archive-enabled table, the table space that contains the associated archive table

All table spaces that were recovered as part of the table space set are listed after the message heading.

csect-name
The name of the control section that issued the message.

System action

The listed table spaces are recovered.

User response

No action is required.

Severity

0 (informational)

Related concepts

Common quiesce points (Db2 Utilities)
Creation of relationships with referential constraints (Introduction to Db2 for z/OS)
LOB table spaces (Db2 Administration Guide)
XML table spaces (Db2 Administration Guide)
Archive-enabled tables and archive tables (Introduction to Db2 for z/OS)

Related reference

RECOVER (Db2 Utilities)

DSNU536I *csect-name* - RELATIONSHIP *relationship-identifier* ON TABLE *table-name* CREATED AFTER QUIESCE POINT

Explanation

The relationship named *relationship-identifier* was created on the dependent table, *table-name*, after the quiesce point used for recovering to a point in time. The table space in which *table-name* resides is set to check pending beginning with the first record of the *table-name* table.

System action

No action is taken.

User response

Analyze and resolve the check pending state.

Severity

4 (warning)

Related concepts

CHECK-pending status after running LOAD (Db2 Utilities)

Related tasks

Resetting CHECK-pending status (Db2 Utilities)
Collecting data for failures after a point-in-time recovery (Collecting data)
Adding referential constraints to existing tables (Db2 Administration Guide)

Related reference

CHECK-pending status (Db2 Utilities)

Related information

Recovering from referential constraint violation (Db2 Administration Guide)

DSNU537I ***csect-name object-type object-qualifier.object-name* IS NOT ALLOWED IN THE LIST**

Explanation

The RECOVER utility or COPY utility found a directory or catalog table space in a list with other table spaces or with user-defined indexes.

csect-name
The name of the control section that issued the message.

object-type
The type of object.

object-qualifier.object-name
The qualified object name.

For the COPY utility, you cannot specify the following table spaces in a list with other table spaces:

- DSNDB01.SYSUTILX
- DSNDB06.SYSCOPY
- DSNDB01.SYSLGRNX
- DSNDB01.SYSDBDXA

However, you can specify these table spaces in a list with their indexes that are defined by IBM.

For the RECOVER utility, you cannot recover more than one directory or catalog table space in a list. Directory and catalog table spaces must be recovered individually in a particular order, because the recovery of some objects depends on information in other objects. Indexes that are defined by IBM can be specified with their associated directory or catalog table space in a list.

System action

The utility job terminates.

User response

Remove the directory and catalog object names from the list. Then, submit the COPY or RECOVER job again.

Severity

8 (error)

Related concepts
Copies of lists of objects (Db2 Utilities)
Related tasks
Recovering catalog and directory objects (Db2 Utilities)

DSNU538I **RECOVER ERROR RANGE OF DSN=*dataset-name* ON VOLUME=*volume-serial* FROM CCHH=X'*low-cchh*' TO CCHH=X'*high-cchh*' CONTAINS PHYSICAL ERROR**

Explanation

This message indicates that the error range involved in the error range recover *dataset-name* is the data set that has the physical error. The data set resides on DASD volume *volume-serial*, and the error range is from track address X'*low-cchh*' to track address X'*high-cchh*'.

If the error range of a data set covers more than one extent or more than one volume, one message is issued per extent per volume.

dataset-name
The data set name.

volume-serial
The volume serial number.

low-cchh
The track address of the beginning of the error range, in CCCCcccH format.

high-cchh
The track address of the end of the error range, in CCCCcccH format.

System action

Physical I/O error detected during error range recover. Processing terminated with return code 8.

System programmer response

A DSNU086 message is issued to the console by Db2 while running error range recovery. This message indicates that the physical error is not recovered. Run ICKDSF or equivalent service utility to recover the physical error then run the error range recover again.

Problem determination

Use the information that is provided by this message to run ICKDSF and then run error range recover again.

Severity

8 (error)

Related reference
Db2 catalog tables (Db2 SQL)
Related information
DSNU086I

csect-name ttttt I/O ERRORS ON SPACE= *ddddddddd*. DATA SET NUMBER= *nnn*. I/O ERROR PAGE RANGE= *aaaaaa, bbbbbb*.

DSNU539I ***csect-name* - RECOVER PROCEEDS AT THE *site-type* SYSTEM**

Explanation

The RECOVER process continues at the RECOVERY SITE system, and/or the TRACKER SITE system. Db2 issues this message for informational purposes only.

System action

The utility continues.

Severity

0 (informational)

DSNU540I ***csect-name* DYNAMIC ALLOCATION FOR DATA SET *data-set-name* WILL WAIT FOR UNIT TO BECOME AVAILABLE**

Explanation

A request to dynamically allocate a data set for a BATCH UTILITY job was refused because a unit was not available. The request was repeated after setting an indicator in the dynamic allocation parameter list to cause the job to wait until a unit becomes available.

System action

Processing continues after a unit becomes available and is allocated.

Severity

0 (informational)

DSNU541I **UNABLE TO ALLOCATE THE PRIMARY COPY DATASET *data-set-name*, BACKUP COPY IS USED**

Explanation

If RECOVER or MERGECOPY has an allocation error on the primary copy data set, it will locate the backup copy data set for the same system (local or recovery). The utility continues.

Severity

0 (informational)

DSNU542I ***csect-name* - UNABLE TO OPEN THE PRIMARY COPY DATASET *dataset-name*, BACKUP COPY IS USED**

Explanation

If RECOVER or MERGECOPY has an open error in the primary copy data set, it will deallocate that copy data set and try to allocate the backup copy data set for that same system (local or recovery). The utility continues.

Severity

0 (informational)

DSNU543I ***csect-name* - I/O ERROR READING PAGE *page_number* IN THE PRIMARY COPY DATASET *dataset-name*, BACKUP COPY IS USED**

Explanation

If RECOVER or MERGECOPY has an I/O error when reading a page, with the specified page number, from the primary copied data set, it will locate the backup copied data set in that same system (local or recovery) and continue reading pages starting from the page number in error.

Severity

0 (informational)

DSNU544I ***csect-name* - UNABLE TO OPEN THE COPY DATASET *dataset-name* FOR THE RECOVERY OF *obj-type obj-qualifier.obj-name*, RC= *reason-code***

Explanation

RECOVER was unable to open the data set 'dataset-name'. because of 'reason-code' from the open abend. The 'reason-code' is taken from field SDWAABCC in the SDWA.

System action

The RECOVER utility continues processing, searching for the prior image copy or applying log records.

Severity

0 (informational)

DSNU545I ***csect-name* - I/O ERROR READING PAGE *page-number* IN THE COPY DATASET *dataset-name* DURING RECOVERY OF *obj-type obj-qual.obj-name***

Explanation

An I/O error was detected while reading page *page-number* from copy data set *dataset-name*. The message is issued for the following reasons:

- The data set is the primary copy data set, and there is no backup data set.
- The open error is from the backup copy data set.

System action

The RECOVER utility continues processing, searching for the prior image copy, or applying log records.

Severity

0 (informational)

DSNU546I **LOGONLY RECOVER CANNOT PROCEED BETWEEN BEGINNING RBA '*xxxxxxxxxxxx*' AND ENDING RBA '*yyyyyyyyyyyy*' ON DSNUM *dsnum* BECAUSE A NON-RECOVERABLE EVENT HAS BEEN ENCOUNTERED FROM SYSIBM.SYSCOPY WHICH HAS DBNAME=*database-name* TSNAME=*space-name* DSNUM=*dsnum* ICTYPE=*x* START_RBA=X'zzzzzzzzzzzz'.**

Explanation

A nonrecoverable event (for example, LOAD LOG(NO), REORG LOG(NO)) occurred within the log range between the beginning log RBA or LRSN and ending log RBA or LRSN for the RECOVER LOGONLY utility.

System action

The RECOVER utility completes unsuccessfully with return code 8.

System programmer response

Find a proper prior point in time as a target recovery point and rerun the RECOVER utility job with the TORBA, TOCOPY, or TOLOGPOINT option.

Severity

8 (error)

Related concepts

Point-in-time recovery using the RECOVER utility (Db2 Administration Guide)

How RBA and LRSN values are displayed (Db2 Administration Guide)

Related tasks

Backing up and recovering your data (Db2 Administration Guide)

Related reference

RECOVER (Db2 Utilities)

DSNU547I **LOGONLY *action* CANNOT PROCEED BECAUSE THE STARTING RBA=X'xxxxxxxxxxxx' IN THE HEADER PAGE PGNO=X'xxxxxx' FOR *obj-type obj-qual.obj-name* IS INVALID.**

Explanation

One of the following results occurred:

- The data set was restored from an earlier release backup that does not have a starting RBA or LRSN in the header page.
- The TORBA or TOLOGPOINT option is specified to an RBA or LRSN that is lower than the starting RBA or LRSN in the header page.

System action

The RECOVER or RESTORE utility job terminates with return code 8.

System programmer response

Use the RECOVER or RESTORE utility without the LOGONLY option, if possible, or change the RBA or LRSN of the TORBA or TOLOGPOINT option to a valid RBA or LRSN value.

Severity

8 (error)

Related concepts

How RBA and LRSN values are displayed (Db2 Administration Guide)

DSNU548I **DBID=X'xxxx' and PSID=X'xxxx' IN THE HEADER PAGE OF *obj-type obj-qual.obj-name* DO NOT MATCH THE DB2 CATALOG.**

Explanation

The DBID and PSID in the header page do not match the Db2 catalog. It is likely that the wrong data sets were restored.

System action

The RECOVER utility job terminates with return code 8.

System programmer response

Find the correct data sets and rerun the job.

Severity

8 (error)

DSNU549I **RECOVER *obj-type obj-qual.obj-name dsnum* USES ONLY DB2 LOGS STARTING FROM LOGPOINT=X'*xxxxxxxxxxxx*'.**

Explanation

The RECOVER utility issues one message for each Db2 object that uses only Db2 logs to recover. In a non data-sharing environment, the LOGPOINT value is specified by an RBA; in a data sharing environment it is specified by an LRSN.

System action

RECOVER utility processing continues.

Severity

0 (informational)

DSNU550I ***csect-name* INDEX NAME= *index-name* IS EMPTY**

Explanation

While attempting to REBUILD the indicated index, it was determined that the table upon which the index is based is empty.

System action

Utility processing proceeds to the next utility request, if any.

Severity

4 (warning)

DSNU551I ***csect-name* INDEX NAME= *index-name* PART=*part-num* IS EMPTY**

Explanation

While attempting to REBUILD the indicated index partition, it was determined that the partition upon which the specified index partition is based is empty.

System action

Utility processing proceeds to the next utility request, if any.

Severity

4 (warning)

DSNU552I ***csect-name* RECOVER CANNOT PROCEED BECAUSE THE *starting/ending* LOGPOINT *xxx* IS NOT WITHIN THE RECOVERY RANGE OF *xxx* AND *xxx* FOR *obj-type obj-qual.obj-name***

Explanation

The starting or ending LOGPOINT found for this recovery job is outside the available recovery information. A LOGPOINT value is an RBA or LRSN. The RECOVER utility cannot process this request.

System action

The RECOVER utility terminates.

User response

Use the recovery information that is available from the REPORT utility. Execute the RECOVER utility within the available recovery range.

Severity

8

DSNU553I ***csect-name* INVALID PARTITION NUMBER=*partition-number* SPECIFIED FOR INDEX NAME=*index-name***

Explanation

An invalid partition number *partition-number* was specified for index *index-name* in the utility statement.

System action

Further utility processing is terminated.

User response

Correct the partition number or verify that the index name is specified correctly, and resubmit the utility statement in a new utility job step.

Severity

8 (error)

Related concepts

Db2 online utilities (Db2 Utilities)

Db2 stand-alone utilities (Db2 Utilities)

DSNU554I ***csect-name*** **- DUPLICATE INDEX NAMES EXIST IN THE SPECIFIED INDEX NAME LIST**

Explanation

When attempting to CHECK or REBUILD the indicated indexes, it was determined that duplicate index names were specified in the index name list.

System action

The utility job terminated.

User response

Correct the index-name(s) in the index name list and resubmit the job.

Severity

8 (error)

DSNU555I ***csect-name*** **UNLOAD PHASE STATISTICS, NUMBER OF RECORDS=*xxxx***

Explanation

This message is issued at the normal completion of the UNLOAD phase of the REBUILD INDEX utility. It gives the number of records that were unloaded (xxxx) for the specified table space.

Severity

0 (informational)

DSNU556I ***csect-name*** **RECOVER CANNOT PROCEED FOR *object-type object-qualifier.object-name* BECAUSE A SYSCOPY RECORD HAS BEEN ENCOUNTERED WHICH HAS DBNAME= *dbname* TSNAME= *tsname* DSNUM= *dsnum* ICTYPE= *ictype* STYPE= *stype* STARTRBA=X'*rba*' LOWDSNUM= *low-dsnum* HIGHDSNUM=*high-dsnum*.**

Explanation

Db2 encountered an event that is recorded in a SYSCOPY record that prohibits recovery processing.

csect-name
The name of the control section that issued the message.

object-type
The type of object.

object-qualifier.object-name
The name of the object, as a qualified name.

database-name
Name of the database.

tablespace-name
Name of the table space.

ictype* and *stype
The type of event is recorded in the *ictype* and *stype* columns.

ICTYPE=A (ALTER)

STYPE=C
An ALTER took place that performed one of the following actions:

- Added a column to a table and the column was not added to the index in the same commit scope. Rebuild the index instead of recovering it.
- Dropped a column from a table.

A TTYPE value of blank indicates that the column was added and a TTYPE value of 'D' indicates that the column was dropped.

STYPE=D
One of the following situations occurred:

- If the TTYPE value is blank, ALTER TABLE ALTER COLUMN SET DEFAULT was executed on a column that was added (with ALTER TABLE ADD COLUMN), and point-in-time recovery before the ALTER COLUMN SET DEFAULT is not allowed. For this case, the TTYPE value is blank.
- If the TTYPE value is non-blank, the TTYPE value is the data set size. The DSSIZE attribute of the table space was updated by an ALTER statement.

STYPE=E
An ALTER TABLE EXCHANGE occurred and a point-in-time recovery before the exchange is not allowed. If the object that is being recovered is an index, the index cannot be recovered before the rotation of its underlying table.

STYPE=F
The buffer pool attribute of the object was updated by an ALTER statement and a point-in-time recovery before the update is not allowed.

STYPE=G
An ALTER INDEX REGENERATE was done. Rebuild the index instead of recovering it.

STYPE=I
A SYSCOPY record for a REORG with TTYPE=I or TTYPE=D indicates that a

REORG to materialize an ALTER COLUMN INLINE LENGTH was found. However, not all related objects (base table space and LOB table space) were recovered as a set to the same point in time. The point-in-time recovery is not allowed unless both the related base and LOB objects are recovered as a set.

STYPE=M
The MAXPARTITIONS attribute of the table space was updated by an ALTER statement and a point-in-time recovery before the update is not allowed.

STYPE=N
The index was updated by an ALTER statement to have the NOT PADDED attribute. Rebuild the index instead of recovering it.

STYPE=P
The index was updated by an ALTER statement to have the PADDED attribute. Rebuild the index instead of recovering it.

STYPE=R
A table space partition was rotated and a point-in-time recovery before the rotation is not allowed. If the object that is being recovered is one of the following objects, it cannot be recovered to a point in time before the rotation:

- An index partition
- A LOB table space that belongs to the rotated partition

STYPE=S
The SEGSIZE attribute of the table space was updated by an ALTER statement and a point-in-time recovery before the update is not allowed.

STYPE=U
ALTER TABLE ALTER COLUMN DROP DEFAULT was executed on a column that was added (with ALTER TABLE ADD COLUMN), and point-in-time recovery before the ALTER COLUMN DROP DEFAULT is not allowed.

STYPE=V
An ALTER TABLE COLUMN occurred on an indexed column for a numeric data type change. Rebuild the index instead of recovering it

STYPE=X
A REORG dropped one or more empty partitions from the related table space. A partition cannot be recovered to a point before it was dropped by the REORG utility. Recovery to the current state at the table space level is not allowed after one or more empty partitions are dropped during REORG TABLESPACE on a partition-by-growth table space. Until a full image copy at the table space level has been performed, partition-level recoveries (DSNUM *integer*) need to be done instead.

STYPE=Z
A column that is in the key of an index that was versioned before DB2 Version 8 was updated by an ALTER statement. Rebuild the index instead of recovering it

ICTYPE=C (CREATE)

STYPE=L
Indicates that the object was created with the LOGGED attribute.

STYPE=O
Indicates that the object was created with the NOT LOGGED attribute.

ICTYPE=F (full image copy)
One of the following situations occurred:

- An attempt was made to recover an index to a prior point-in-time and more than 16 versions of the index exist. (ALTER TABLE COLUMN was done more than 16 times to alter the index key). The point-in-time recovery is not allowed.
- An attempt was made to recover a compressed, versioned index, but the format of the image copy of the index is not correct. This situation occurs when the image copy was taken before Db2 code was applied to allow recovery of compressed, versioned indexes.

In both cases, rebuild the index.

ICTYPE=L (SQL)

STYPE=M
Indicates that an SQL mass DELETE, TRUNCATE TABLE, DROP TABLE, or ALTER TABLE ROTATE PARTITION occurred on a segmented table space or universal table space. The LOWDSNUM column contains the OBID of the affected table. The BACKOUT YES option for RECOVER is not supported.

ICTYPE=M (MODIFY RECOVERY)

STYPE=R
Indicates that the MODIFY RECOVERY utility deleted recovery information that is required for this recovery.

ICTYPE=P (point-in-time recovery)
An index is being recovered to a point in time that is different than the point in time of its underlying table space. The recover of the index is not allowed. Use the REBUILD INDEX utility instead.

ICTYPE=P (point-in-time recovery) or E (recovery to the current state)
If the DSNU1528I message was previously issued for this object, then see that message for details.

ICTYPE=R,S,W, or X (REORG, LOAD REPLACE, CATENFM)

STYPE=A
A SYSCOPY record for a REORG or LOAD REPLACE operation that redistributed data across partitions was found. The partitions that were affected by the ALTER INDEX that changed the limit keys must be recovered in the same list.

STYPE=S
The CATENFM utility was run. A point-in-time recovery before the CATENFM process is not allowed unless the entire system (including the Db2 catalog and directory) are recovered to the same point.

STYPE= "blank"
A SYSCOPY record was found for a REORG operation with the LOG(YES) option in the recovery period. Recovery to a prior point in time is not possible.

System action

The RECOVER utility terminates.

User response

Run the REPORT RECOVERY utility, and analyze the report of the recovery information for the object.

If a SYSCOPY record for a REORG or LOAD REPLACE operation that redistributed partition data was found, add the missing partitions to the recover list. Use the LOWDSNUM and HIGHDSNUM values in the SYSCOPY record as a guide.

If a SYSCOPY record for a REORG operation that materialized an ALTER COLUMN INLINE LENGTH was found, add the missing objects to the point-in-time recover list.

If the object is an index, use the REBUILD INDEX utility to rebuild the index.

Severity

8 (error)

Related concepts

How RBA and LRSN values are displayed (Db2 Administration Guide)

Point-in-time recovery (Db2 Utilities)

DSNU557I ***csect-name - obj-type obj-qual.obj-name* IS IN RECOVER PENDING**

Explanation

If the REBUILD utility issued this message, the corresponding table space to this index was rebuilt to a point in time with keyword TOCOPY, TOLOGPOINT, or TORBA. Thus, the index was placed in REBUILD pending status.

If the REBUILD INDEX utility issued this message, the index is in REBUILD pending status. Either duplicate index entries existed during the BUILD phase of the REBUILD INDEX, or invalid KEY/RIDs, which do not belong to the partition of the cluster index, were detected. The duplicate index entries or invalid KEY/RID entries must be resolved before starting the REBUILD INDEX utility again to REBUILD the index and remove the index from REBUILD pending status.

If the REORG utility with SHRLEVEL REFERENCE or CHANGE (or -TERM UTILITY) issued this message, the index is in REBUILD pending status. During the renaming of a data set during REORG, either a data set with the source name did not yet exist or a data set with the target name already existed.

User response

If the REBUILD or REORG utility (or -TERM UTILITY) issued this message, use the REBUILD INDEX utility to REBUILD this index.

If the REBUILD INDEX utility issued this message, take one of the following actions:

- Resolve the duplicate index entries or invalid keys and rerun the REBUILD INDEX utility.
- Use the REPAIR SET NORCVRPEND utility or the START DATABASE FORCE command to reset the REBUILD pending status. However, these two options will not correct the index.

Severity

4 (warning) or 8 (error)

DSNU558I ***csect-name* ALL INDEXES OF TABLESPACE= *table space-name* ARE IN REBUILD PENDING**

Explanation

The REBUILD TORBA, TOLOGPOINT, or TOCOPY utility issues this message to inform the user of the state of all indexes belonging to the REBUILDed table space. All indexes were put in REBUILD pending status to prevent data and index inconsistency. All indexes should be REBUILDed before they are used.

System action

The REBUILD utility completed successfully.

User response

REBUILD or rebuild all indexes of the REBUILD table space.

Severity

4 (warning)

DSNU559I ***csect-name - obj-type obj-qual.obj-name* PARTITION *partition-number* IS IN RECOVER PENDING STATE**

Explanation

If the REBUILD utility issued this message, one partition of a partitioned table space is being rebuilt to a point in time with keyword TOCOPY, TOLOGPOINT, or TORBA. The corresponding index for that partition was placed in rebuild pending status.

If the REBUILD INDEX utility issued this message, the index or the partition of a cluster index is in rebuild pending status. Either duplicate index entries existed during the BUILD phase of the REBUILD INDEX or INDEX PART, or invalid KEY/RIDs, which do not belong to the partition of the cluster index, were detected. The duplicate index entries or invalid KEY/RID entries must be resolved before starting the REBUILD INDEX utility again to rebuild the index and remove the index from rebuild pending status.

If the REORG utility with SHRLEVEL REFERENCE or CHANGE (or -TERM UTILITY) issued this message, one partition of a partitioned index was placed in rebuild pending status. During the renaming of a data set during REORG, either a data set with the source name did not yet exist or a data set with the target name already existed.

User response

If the REBUILD or REORG utility (or -TERM UTILITY) issued the message, rebuild this index with the REBUILD INDEX utility.

If the REBUILD INDEX utility issued this message, take one of the following actions:

- Resolve duplicate index entries or invalid keys and rerun the REBUILD INDEX utility.
- Use the REPAIR SET NORCVRPEND utility or START DATABASE FORCE command to reset the rebuild pending status. However, these two options will not correct the index.

Severity

4 (warning) or 8 (error)

DSNU560I ***csect-name* - TABLESPACE= *database.tablespace* PART= *partition number* IS IN RECOVERY PENDING STATE**

Explanation

The table space partition of a table space on which the utility was running is in recovery pending status. A RECOVER TABLESPACE at the partition level is required.

System action

No action is taken.

User response

Take one of the following actions:

- Run the RECOVER TABLESPACE utility on the table space partition.
- Run the LOAD REPLACE utility on the table space partition.
- Use the REPAIR SET NORCVRPEND utility or the START DATABASE FORCE command to reset the recovery pending status. However, these two options will not correct the table space.

Severity

4 (warning)

DSNU561I ***csect-name - obj-type obj-qual.obj-name* PARTITION *part-number* IS IN CHECK PENDING**

Explanation

This message is issued to report the check pending state of the specified partition.

User response

If the object is a table space partition with referential relationships, then run the CHECK DATA utility to check for referential integrity violations.

If the object is a base table space partition, then run the CHECK DATA utility to validate the auxiliary columns.

If the object is an index space partition, then run the CHECK INDEX utility to verify that the index keys are consistent with the data in the table space partition.

Correct all errors before attempting to use the object again.

Severity

4 (warning)

DSNU562I ***csect name*** **- TABLESPACE** ***database.tablespace*** **IS IN RECOVERY PENDING**

Explanation

The table space against which the utility was running is in recovery pending status. A RECOVER TABLESPACE is required.

System action

No action is taken.

User response

Take one of the following actions:

- Run the RECOVER TABLESPACE utility on the table space.
- Run the LOAD REPLACE utility on the table space.
- Use the REPAIR SET NORCVRPEND utility or the START DATABASE FORCE command to reset the recovery pending status. However, these two options will not correct the table space.

Severity

4 (warning)

DSNU563I ***csect name- obj-type obj-qual.obj-name*** **IS IN CHECK PENDING**

Explanation

This message is issued to report the check pending state of the specified object.

User response

If the object is a table space with referential relationships, then run the CHECK DATA utility to check for referential integrity violations.

If the object is a base table space with LOB columns, then run the CHECK DATA utility to validate the auxiliary columns.

If the object is a LOB table space, then run the CHECK LOB utility to validate the structure of the LOB table space.

If the object is an index space, then run the CHECK INDEX utility to verify that the index keys are consistent with the data in the table space or table space partition.

Correct all errors before attempting to use the object again.

Severity

4 (warning)

DSNU564I ***csect*** **- RESTART NOT ALLOWED FOR** ***obj-type obj-qual.obj-name***

Explanation

Restart of the RECOVER utility is not allowed for one of the following reasons:

1. During the RESTORE phase, access to image copies failed. Therefore, RECOVER determined an earlier point of recovery to search for available image copies. RECOVER might not be able to re-create the original failures for restart.
2. The utility uses the LOGONLY option and was previously restarted with RESTART(CURRENT). It cannot now be started with RESTART(PHASE).

System action

The utility job terminates. If RECOVER acts on a list of objects, the restarted job terminates with the first object for which restart is not allowed.

User response

For case 1, execute REPORT RECOVERY on the object and also collect the output from the previous execution of RECOVER TABLESPACE. Using those two outputs and the console log, determine the reason for the failure during the RESTORE phase. Correct the reason for the failure, if necessary. Terminate the outstanding utility then rerun the RECOVER TABLESPACE without RESTART.

For case 2, restart the utility with RESTART(CURRENT) or restore the data sets and rerun the RECOVER job from the beginning.

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.

Severity

8 (error)

DSNU565I ***csect-name*** **CHECK CONSTRAINT** ***constraint-name*** **ON TABLE** ***table-name*** **WAS CREATED AFTER THE TARGET RECOVERY POINT**

Explanation

The check constraint *constraint-name* was created on table *table-name* after the target recovery point. The target recovery point is the specified time or RBA in the point-in-time recovery. The associated table space was placed in check pending status because the RECOVER utility cannot determine whether check integrity was maintained. Data in the table might have constraint violations.

System action

RECOVER processing continues.

User response

Resolve the check pending status.

Severity

4 (warning)

Related concepts

CHECK-pending status after running LOAD (Db2 Utilities)

Related tasks

Resetting CHECK-pending status (Db2 Utilities)

Collecting data for failures after a point-in-time recovery (Collecting data)

Adding referential constraints to existing tables (Db2 Administration Guide)

Related information

Recovering from referential constraint violation (Db2 Administration Guide)

DSNU566I ***csect-name*** **RESTORE OF** ***obj-type obj-qual.obj-name*** **FROM DATA SET** ***data-set-name*** **COMPLETED, ELAPSED TIME =** ***hh*****:****mm*****:****ss***

Explanation

This message is issued at the successful completion of the RESTORE phase of the RECOVER utility when the DFSMSdss RESTORE command is issued. The *data-set-name* identifies the DFSMS concurrent copy that was being restored. The elapsed time of the RESTORE is shown in hours, minutes, and seconds.

System action

RECOVER utility processing continues.

User response

No action is required.

DSNU568I ***csect-name obj-type obj-qual.obj-name*** **IS IN INFORMATIONAL COPY-PENDING STATE**

Explanation

This message reports that the state of a table space or index has informational COPY- pending status. This state is an advisory state, so the object is available for read and write access. The Informational Copy Pending state is set for table spaces with the NOT LOGGED attribute when the table space is opened for update. The Informational Copy Pending state is set for indexes when a new recovery base needs to be established due to a non-recoverable event (such as a REORG or LOAD utility).

System action

None.

User response

Take a full image copy to remove the informational COPY-pending status.

Severity

0 (informational)

DSNU569I ***csect-name*** **RESTORE OF** ***obj-type obj-qual.obj-name*** **FROM DATA SET** ***data-set-name*** **FAILED WITH RETURN CODE** ***return-code***

Explanation

This message is issued in the RESTORE phase of the RECOVER utility. The DFSMSdss RESTORE command was issued to restore the DFSMS concurrent copy named *data-set-name*. The return code is from DFSMSdss RESTORE.

System action

The RECOVER utility searches for the next recoverable point. DFSMSdss issues ADR messages to the job output to indicate the reason for the return code.

User response

You might want to investigate why this DFDSS RESTORE command failed. Collect any console messages. Look up the return code and any ADR messages in the appropriate DFSMSdss manual.

Problem determination

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Job output.

Severity

4 (warning)

DSNU570I ***csect-name obj-type obj-qual.obj-name* PARTITION *part-num* IS IN INFORMATIONAL COPY PENDING**

Explanation

An image copy of the index partition is required to establish a new base from which the index partition can be recovered. This is an advisory state, so the index is available for read or write access.

User response

Take an image copy of the index partition or of the entire index, depending on your backup and recovery procedures.

Severity

0 (informational)

DSNU571I ***csect-name* ALL *site* SYSCOPY RECORDS FOR *obj-type= obj-qual.obj-name* PARTITION=*part-num* HAVE BEEN DELETED**

Explanation

The MODIFY RECOVERY utility deleted all of the SYSCOPY table records for the specified table space or index space partition. Any related SYSLGRNX rows are deleted if DSNUM ALL is specified. The 'part-num' of specified table space or index space is no longer recoverable at the 'site'. The 'site' can be 'LOCALSITE' or 'RECOVERYSITE'.

System action

Utility processing continues.

System programmer response

The 'part-num' of specified table space or index space is no longer recoverable at the 'site' after this message is received. Use the COPY utility to create one or more copies for the 'site' to establish a base for future recovery.

Severity

4 (warning)

DSNU572I ***csect-name* ALL *site* SYSCOPY RECORDS FOR *obj-type= obj-qual.obj-name* HAVE BEEN DELETED**

Explanation

The MODIFY RECOVERY utility deleted all of the SYSCOPY table records for the specified table space or index space. Any related SYSLGRNX rows are deleted if DSNUM ALL is specified. The table space or index space is no longer recoverable at the 'site'. The 'site' can be 'LOCALSITE' or 'RECOVERYSITE'.

System action

Utility processing continues.

System programmer response

The table space or index space is no longer recoverable at the 'site' after this message is received. Use the COPY utility to create one or more copies for the 'site' to establish a base for future recovery.

Severity

4 (warning)

DSNU573I ***csect-name* NO BACKUP COPIES FOUND FOR THIS TABLESPACE OR DATASET**

Explanation

The MODIFY RECOVERY utility was unable to locate any SYSCOPY records older than the determined cleanup date. No records have been deleted.

System action

Processing completes normally.

Severity

4 (warning)

DSNU575I ***csect-name*** **- MODIFY COMPLETED SUCCESSFULLY**

Explanation

This message reports the successful completion of the MODIFY utility. The requested cleanup of old SYSIBM.SYSCOPY entries was completed.

System action

The MODIFY utility completed normally.

Severity

0 (informational)

DSNU577I ***csect-name*** **MODIFY HAS NOT DELETED ALL SYSCOPY RECORDS AS REQUESTED.**

Explanation

If MODIFY RECOVERY is invoked with a partition-number (DSNUM), and the table space level recoverable point is older than the determined cleanup date, all SYSCOPY records after the table space recoverable point cannot be deleted.

System action

Processing continues normally.

Severity

4 (warning)

DSNU578I ***csect-name*** **SYSLGRNX INFORMATION FOR MEMBER** ***member-name***

Explanation

In the data sharing environment, the SYSLGRNX records reported with DSNU513 are grouped by the respective member name. Each group member has header message DSNU578 to identify the member. This message precedes DSNU513.

System action

The RECOVER utility continues with the LOGAPPLY phase.

DSNU579I ***csect-name*** **RECOVER UTILITY LOG APPLY AT LOGPOINT** ***xxx***

Explanation

This message shows the progress of the LOGAPPLY phase of the RECOVER utility. The highest LOGPOINT that was applied is *xxx*. The value of logpoint is RBA in a non data-sharing environment and LRSN in a data sharing environment.

System action

The LOGAPPLY phase continues normally.

DSNU580I ***csect-name*** **REPORT UTILITY COMPLETE, ELAPSED TIME=*hh/mm/ss***

Explanation

The message is issued at the normal completion of the REPORT utility. The time that elapsed since the beginning of the REPORT utility to its completion was 'hh' hours, 'mm' minutes, and 'ss' seconds.

System action

This message indicates the normal completion of the REPORT utility. Processing continues to the next utility statement in the utility job step, if any. If not, the utility job step is normally terminated, and the resources held become available for further processing. The UTILID of the utility job step becomes available for reuse.

Severity

0 (informational)

DSNU581I ***csect-name*** **REPORT RECOVERY** ***obj-type obj-qual.obj-name***

Explanation

This message indicates the beginning of the recovery information report for a table space or index space.

System action

Utility processing continues.

Severity

0 (informational)

DSNU582I ***csect-name*** **REPORT RECOVERY** ***obj-type object-qualifier.object-name*** **SYSCOPY ROWS AND SYSTEM-LEVEL BACKUPS**

Explanation

This message provides the header information for the SYSCOPY section of the REPORT RECOVER output. This section displays the SYSCOPY rows for the table space or index space. Whether the information is displayed at the partition level is determined by the DSNUM specification in the REPORT RECOVERY input statement.

This section also displays the SYSTEM LEVEL BACKUPs that can be used for recovering this table space or index space or specific partitions of it.

csect-name
The name of the control section that issued the message.

The fields in the row are:

- TIMESTAMP
- ICTYPE, if a SYSCOPY row is present.

  The following delimiters might be present around the ICTYPE value to provide additional information when a SYSCOPY row is present:

  # #
  SYSCOPY entry that was created before any alteration was materialized.

  *** ***
  Non image copy SYSCOPY entry.

  < >
  Image copy prior to rebalancing of table space partitions.

  ( )
  Image copy prior to LOG(NO) event. For image copies of indexes, the LOG(NO) event might have occurred on its underlying table space.
- TYPE = SLB, if a row that is related to system-level backup is present.
- DSNUM
- FILESEQNO
- START_RBA
- SHRLEVEL
- DEVTYPE
- ICBACKUP
- DSNAME
- STYPE
- PIT_RBA
- DSVOLSER
- HIGHDSNUM
- LOWDSNUM

When a row related to system-level backups is present, the following fields are included:

- RBLP START
- STCK DATA
- DATA COMPLETE
- LRSN TOKEN
- MEMBER NAME

User response

No action is required.

Severity

0 (informational)

Related reference
SYSCOPY catalog table (Db2 SQL)

DSNU583I ***csect-name*** **SYSLGRNX ROWS FROM REPORT RECOVERY FOR** ***obj-type obj-qual.obj-name***

Explanation

This is the header message for the SYSLGRNX section of the REPORT RECOVERY output. This section displays the SYSLGRNX rows for the table space, index space, or partition as specified in the REPORT RECOVERY input statement. The fields in the SYSLGRNX row are:

- UCDATE - Modification date
- UCTIME - Modification time
- START RBA - Starting RBA
- STOP RBA - Stopping RBA
- START LRSN - Starting LRSN
- STOP LRSN - Stopping LRSN
- DSNUM - Partition number
- MEMBER - Data sharing member

An invalid SYSLGRNX record is marked with '**' at the end. The invalid SYSLGRNX record cannot be used for recovery because the range is outside recovery. If records are marked with '**', then a DSNU594 message should have been issued prior to this.

A SYSLGRNX record created after the last FULL IMAGE COPY, LOAD REPLACE LOG YES, or REORG LOG YES is marked with '*' at the end.

System action

Processing continues normally.

Severity

0 (informational)

DSNU584I ***csect-name*** **REPORT RECOVERY** ***obj-type obj-qual.obj-name*** **BSDS VOLUMES**

Explanation

Message for the BSDS VOLUMES section of the REPORT RECOVERY output. This section contains BSDS volumes for the archive log (1 or 2) records associated with the table space or index space specified in the REPORT RECOVERY input statement.

An archive log record created after the last FULL IMAGE COPY, LOAD REPLACE LOG YES, or REORG LOG YES is marked with and asterisk (*) at the end.

System action

Processing continues normally

DSNU585I ***csect-name*** **REPORT RECOVERY** ***obj-type obj-qual.obj-name*** **CURRENT**

Explanation

The message is issued in response to the CURRENT option of REPORT RECOVERY utility. It indicates that only the information since the last recoverable point for the specified table space or index space is reported.

System action

Normal utility processing continues.

Severity

0 (informational)

DSNU586I ***csect-name*** **REPORT RECOVERY** ***obj-type obj-qual.obj-name*** **SUMMARY:**

Explanation

This is the header message for the SUMMARY section of the REPORT RECOVERY utility. All the volumes to be used by the RECOVER utility are summarized.

The volume name is marked with '*' at the end if any archive log record in the volume was created after the last FULL IMAGE COPY, LOAD REPLACE LOG YES, or REORG LOG YES.

System action

Processing continues normally

DSNU587I ***csect-name*** **REPORT TABLESPACE SET WITH TABLESPACE** ***dbname.tsname***

Explanation

Header message for the REPORT TABLESPACESET output. The output contains all table spaces, tables, and dependent tables associated with the table space specified in the REPORT TABLESPACESET input statement.

System action

Utility processing continues normally.

Severity

0 (informational)

DSNU588I ***csect-name*** **NO DATA TO BE REPORTED**

Explanation

The message is issued when no data can be found for a section of the REPORT output.

System action

Utility processing continues.

Severity

0 (informational)

DSNU589I ***csect-name*** **REPORT RECOVERY** ***obj-type obj-qual.obj-name*** **COMPLETE**

Explanation

The message is issued at the normal completion of reporting the RECOVERY information for the table space or index space by the REPORT RECOVERY utility.

System action

This message indicates the normal completion of the REPORT RECOVERY utility. Processing continues to the next utility statement in the utility job step, if any. If not, the utility job step is normally terminated, and the resources held become available for further processing. The UTILID of the utility job step becomes available for reuse. The output from REPORT RECOVERY is now available for RECOVER utility use.

Severity

0 (informational)

DSNU590I ***csect-name*** **RESOURCE NOT AVAILABLE - *object-name* REASON = X'*reason-code*', ON *object-name* PROHIBITS PROCESSING**

Explanation

Processing failed because a required object was not available for the indicated reason.

csect-name
The name of the control section that issued the message.

reason-code
The Db2 reason code that indicates why the object was not available.

object-name
The name of the unavailable object, which is a database, table space, or index space. If the object is in a stopped state and has partitions, the stopped state applies to one or more of the partitions.

System action

- If the return code is 8, processing is terminated.
- If the return code is 4, processing continues to the next request.

User response

Use the -DISPLAY DATABASE command to determine the status of the object and resubmit the job after the object becomes available.

Severity

8 (error) or 4 (warning)

Related reference
-DISPLAY DATABASE (Db2) (Db2 Commands)

DSNU591I ***csect-name*** **AN UNSUCCESSFUL COMPLETION OF A LOG READ, REASON=X'*reason-code*'**

Explanation

The log manager subcomponent of Db2 detected an error during a log read of a SYSIBM.SYSCOPY record for DSNDB06.SYSCOPY, DSNDB01.DBD01, DSNDB01.SYSUTILX, or DSNDB01.SYSDBDXA

csect-name
The name of the control section that issued the message.

reason-code
The Db2 reason code value that indicates the reason for the failure. For explanations of reason codes, see Db2 reason codes (Db2 Codes).

System action

Processing continues.

Problem determination

For more information about the problem, see the information for the reason codes that is returned in this message.

Severity

4 (warning)

Related concepts
Db2 reason codes (Db2 Codes)

DSNU592I ***csect-name*** **REPORT RECOVERY INFORMATION FOR DATA SHARING MEMBER *member-name***

Explanation

The REPORT RECOVERY utility displays this message as the heading for SYSLGRNX and BSDS records or BSDS summary information for each data sharing member. Records for this member follow, if there is data to report.

System action

Utility processing continues.

Severity

0 (Informational)

DSNU593I ***csect-name*** **REPORT RECOVERY ENVIRONMENT INFORMATION: MINIMUM RBA: *rba1* MAXIMUM RBA: *rba2* MIGRATING RBA: *rba3***

Explanation

The REPORT utility issues this message to display recovery environment information used by the RECOVER utility. The maximum and minimum RBAs give the range of possible recovery points on the log before the start of data sharing. The migrating RBA is the RBA at the time of migration from Version 3 to Version 4. If there is data to report, other messages from the REPORT utility follow to display SYSCOPY, SYSLGRNX and BSDS records.

System action

Utility processing continues.

Severity

0 (Informational)

Related concepts

How RBA and LRSN values are displayed (Db2 Administration Guide)

DSNU594I ***csect-name*** **DB2 ENCOUNTERED SYSLGRNX RECORDS THAT CANNOT BE USED FOR RECOVERY.**

Explanation

The utility found one or more SYSLGRNX records that cannot be used for recovery because the range is outside recovery. Invalid SYSLGRNX records are marked with '**' at the end of the record under message DSNU583I.

System action

REPORT utility processing continues. RECOVER utility terminates.

System programmer response

Run the RECOVER utility with the TOCOPY option.

Severity

4 (REPORT - warning) or 8 (RECOVER - error)

DSNU595I ***csect-name*** **ERROR IN GETTING THE HIGHEST MEMBER ID IN DATA SHARING.**

Explanation

The utility could not find a valid highest member ID. The highest member is the last member to join a data sharing group. This message is issued only in a data sharing environment.

System action

The utility stops abnormally.

System programmer response

This error might be an internal Db2 problem. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Severity

8 (error)

DSNU596I ***csect-name*** **ERROR IN GETTING THE MEMBER NAME FOR MEMBER ID**

Explanation

The REPORT utility could not find a valid member name for the member ID, or the member ID supplied is invalid. This message is issued only in a data sharing environment.

System action

The REPORT utility abends.

System programmer response

This might be a Db2 internal problem. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Severity

8 (error)

DSNU597I ***csect-name*** **INVALID SYSLGRNX INFORMATION FROM REPORT RECOVERY**

Explanation

This is the header message for the invalid SYSLGRNX records section of the REPORT RECOVERY output. This section lists SYSLGRNX records containing information that is invalid for recovery purposes.

System action

Utility processing continues.

User response

Examine the invalid SYSLGRNX records with a zero member ID which were generated before enabling data sharing. The MODIFY utility can be used to delete the invalid SYSLGRNX records.

Severity

0 (Informational)

DSNU598I ***csect-name*** **REPORT RECOVERY SYSTEM-LEVEL BACKUPS**

Explanation

This message provides the header information for the system-level backup section of the REPORT RECOVERY output. This section displays the system-level backups that are available. In a data sharing environment the system-level backups are provided in ascending order for the whole data sharing group.

csect-name
The name of the control section that issued the message.

The system-level backup rows contain the following fields:

- START STCK DATA
- START STCK LOG RBLP
- DATA COMPLETE LRSN
- DATA/LOG COMPLETE DATE
- DATA/LOG COMPLETE LTIME
- LOCATION NAME
- TOKEN
- INCREMENTAL
- SUBSYSTEM ID MEMBER NAME z/OS
- CAPTURE CATALOG INFO
- LOG COPY POOL

System action

Processing continues.

User response

No action is required.

Severity

0 (informational)

Related concepts
REPORT output (Db2 Utilities)
Related tasks
Recovering with a system-level backup (Db2 Utilities)
Related reference
REPORT (Db2 Utilities)
RECOVER (Db2 Utilities)

DSNU599I ***csect-name obj-type obj-qual.obj-name* HAS BEEN RECOVERED TO A CONSISTENT POINT IN TIME WITH *obj-type obj-qual.obj-name***

Explanation

This message is issued when an index and its underlying table space have been recovered to a consistent point in time. A consistent point in time is a common QUIESCE point or a common SHRLEVEL REFERENCE copy set (objects were copied in the same list with SHRLEVEL REFERENCE specified). The index is available for read and write access when the recover completes.

System action

Recover processing continues.

Severity

0 (informational)

DSNU600I ***csect-name* INDEX *creator.index-name* POINTS TO A DIFFERENT DATABASE.**

Explanation

A specified index does not point to a table in the database selected. For a RUNSTATS Format 1 invocation, the database is the one specified (or defaulted) in the TABLESPACE parameter. For a RUNSTATS Format 2 invocation, the database is the one which contains the first index in the index-name list.

System action

All remaining RUNSTATS invocation parameters are validated and the executing utility job terminates. Work performed by previous utilities in the job step remains in effect. Subsequent utility control statements are flushed. No record of the utility job step is retained in the system; therefore, it cannot be restarted.

User response

Ensure that all indexes in the list point to the same database and resubmit the RUNSTATS job.

Problem determination

Refer to catalog table SYSIBM.SYSINDEXES to determine the table upon which the index is based. This table must be in the database and table space targeted by the RUNSTATS utility.

Severity

8 (error)

DSNU601I ***csect-name*** **INDEX** ***creator.index-name*** **POINTS TO A DIFFERENT TABLESPACE.**

Explanation

A specified index does not point to a table in the table space selected. The table space is either the one specified in the TABLESPACE parameter or the one which contains the table pointed to by the first specified index.

System action

All remaining RUNSTATS invocation parameters are validated and the executing utility job terminates. Work performed by previous utilities in the job step remains in effect. Subsequent utility control statements are flushed. No record of the utility job step is retained in the system; therefore, it cannot be restarted.

User response

Ensure that all indexes in the list point to tables in the targeted table space and resubmit the RUNSTATS job.

Problem determination

Refer to catalog table SYSIBM.SYSINDEXES to determine the table upon which the index is based. Using the table-name found in SYSIBM.SYSINDEXES, refer to catalog table SYSIBM.SYSTABLES to determine the containing table space.

Severity

8 (error)

DSNU602I ***csect-name*** **STATISTICS ARE NOT COLLECTED FOR NONPARTITIONED INDEX** ***creator.index-name***

Explanation

A LOAD or REORG TABLESPACE utility invocation specified the STATISTICS and PART keywords. A nonpartitioned index is defined on the table space. Partition-level inline statistics cannot be collected for the nonpartitioned index.

For LOAD, statistics cannot be collected because a complete index scan is needed to capture the statistics.

For REORG TABLESPACE, all keys for the nonpartitioned index need to be sorted. Not all keys for the nonpartitioned index were sorted for one of the following reasons:

- The value of REORG TABLESPACE parameter SORTNPSI is NO, or SORTNPSI is not specified, and the value of subsystem parameter REORG_PART_SORT_NPSI is NO.
- SORTNPSI or REORG_PART_SORT_NPSI were set to AUTO or YES, but REORG could not sort all of the nonpartitioned index keys because the amount of data that was being reorganized or the sizes of objects exceeded internal thresholds.

System action

No statistics are collected for the specified indexes, and processing continues. When INDEX ALL is specified, a DSNU602I message is issued for each nonpartitioned index.

User response

Invoke the RUNSTATS utility for the object to collect statistics for the nonpartitioned indexes.

Severity

4 (warning)

Related concepts

Indexes on partitioned tables (Introduction to Db2 for z/OS)

Related reference

LOAD (Db2 Utilities)

RUNSTATS (Db2 Utilities)

Syntax and options of the REORG TABLESPACE control statement (Db2 Utilities)

REORG PART SORT NPSI field (REORG_PART_SORT_NPSI subsystem parameter) (Db2 Installation and Migration)

DSNU603I ***csect-name*** **- OBJECT=*object-name* HAS AN INCOMPLETE DEFINITION**

Explanation

The identified object (TABLE or TABLE SPACE) does not have a complete definition. This can be caused by one of these errors:

- Not defining any tables in the table space (RC=4).
- Not creating the accompanying partitioned index if the table space is partitioned (RC=8).

System action

If the return code is 8, utility processing terminates. If the return code is 4, utility processing continues to the next request.

User response

Complete the table space definition by creating at least one table in the table space, or create the accompanying partitioned index if the table space is partitioned.

Problem determination

Issue an SQL SELECT statement on the catalog to determine if the tables or a partitioned index was not created for the table space.

Severity

8 (error) or 4 (warning)

DSNU604I ***csect-name object* IS EMPTY**

Explanation

The object currently to be scanned by the RUNSTATS utility contains no records. The 'object' can be TABLESPACE or INDEXSPACE.

System action

The object currently to be scanned is recorded in the catalog as empty. The statistics for the object are updated and RUNSTATS continues to the next object, if there is one.

Severity

0 (informational)

DSNU605I ***csect-name* ERROR OCCURRED IN ACCESSING TABLESPACE *database-name.tablespace-name***

Explanation

A previous error makes it impossible for RUNSTATS to scan TABLESPACE 'creator.tbspname'.

System action

The executing utility job step terminates. Work performed by previous utilities in the job step remains in effect. Subsequent utility control statements are flushed. No record of the utility job step is retained in the system; therefore, it cannot be restarted.

User response

Examine prior error messages for error identification. If the error can be corrected, resubmit the RUNSTATS utility in a new utility job step. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Problem determination

Prior messages identify this error. See the documentation for these messages in this manual for additional problem determination.

Severity

8 (error)

DSNU606I ***csect-name* USER NOT AUTHORIZED TO ACCESS TABLESPACE *database-name.tablespace-name***

Explanation

This user is not authorized to execute the RUNSTATS utility against TABLESPACE 'creator.tbspname'.

System action

The executing utility job step terminates. Work performed by previous utilities in the job step remains in effect. Subsequent utility control statements are flushed. No record of the utility job step is retained in the system; therefore, it cannot be restarted.

User response

Contact your system administrator to obtain the proper authority, or have another user with the required authority execute the utility for you.

Severity

8 (error)

DSNU607I ***csect-name* ERROR OCCURRED ACCESSING *obj-type obj-qual.obj-name***

Explanation

A previous error makes it impossible for RUNSTATS to scan *obj-type obj-qual.obj-name*.

obj-type
INDEX or INDEXSPACE that was specified

obj-qual
creator of the index or database-name of the index-space that was specified

obj-name
index-name or index-space-name that was specified.

System action

The executing utility job step terminates. Work performed by previous utilities in the job step remains in effect. Subsequent utility control statements are flushed. No record of the utility job step is retained in the system; therefore, it cannot be restarted.

User response

Examine prior error messages for error identification. If the error can be corrected, resubmit the RUNSTATS utility in a new utility job step.

Problem determination

Prior messages identify this error. See the documentation for these messages in this manual for additional problem determination. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Severity

8 (error)

DSNU608I ***csect-name*** **USER NOT AUTHORIZED TO ACCESS** ***obj-type obj-qual.obj-name.***

Explanation

This user is not authorized to execute the RUNSTATS utility against *obj-type obj-qual.obj-name*.

obj-type
INDEX or INDEXSPACE that was specified

obj-qual
creator of the index or database-name of the index-space that was specified

obj-name
index-name or index-space-name that was specified.

System action

The executing utility job step terminates. Work performed by previous utilities in the job step remains in effect. Subsequent utility control statements are flushed. No record of the utility job step is retained in the system. Therefore it cannot be restarted.

User response

Contact your system administrator to obtain the proper authority, or have another user with the required authority execute the utility for you.

Severity

8 (error)

DSNU609I ***csect-name*** **TABLE** ***table-name*** **IS IN A DIFFERENT TABLESPACE**

Explanation

A table listed in the table name list of the RUNSTATS TABLE keyword was not found in the specified table space.

System action

The executing utility job step terminates. Work performed by previous utilities in the job step remains in effect. Subsequent utility control statements are flushed. No record of the utility job step is retained by the system; therefore it cannot be restarted.

User response

Ensure that all tables in the list are in the specified table space and resubmit the utility.

Problem determination

Refer to the catalog table SYSIBM.SYSTABLES to determine the table space in which the table is located.

Severity

8 (error)

DSNU610I ***csect-name catalog-table-name*** **CATALOG UPDATE FOR** ***object-name*** **SUCCESSFUL**

Explanation

This message indicates that the updating of the statistics columns in the CATALOG TABLE 'catalog-table-name' was successful.

System action

Processing continues with the next catalog table.

Severity

0 (informational)

DSNU611I ***csect-name*** **COLUMN** ***column-name*** **NOT FOUND FOR TABLE** ***creator.table-name***

Explanation

The column name that was specified as an operand of the COLUMN keyword was not found in the specified table.

If this message is displayed after RUNSTATS with USE PROFILE was run, a column in the statistics profile might not exist in the table.

csect-name
The name of the control section that issued the message.

column-name
The name of the column.

creator.table-name
The qualified name of the table.

System action

Validation of the utility invocation statement is completed, and the executing utility job step is terminated.

User response

Ensure that the column name given in the message is correct for the table that was specified. Check that the column name specified in the utility control statement is identical to that found in the SYSIBM.SYSCOLUMNS catalog table. Correct any errors and reissue the utility job.

If the problematic column is in a statistics profile, check whether the column has been renamed since the profile was created or updated. (Columns are renamed by using an ALTER TABLE statement with RENAME COLUMN). If the column has been renamed, delete and re-create the profile with the updated column name.

Problem determination:

Severity

8 (error)

Related tasks

Deleting statistics profiles (Db2 Performance)
Creating statistics profiles (Db2 Performance)

Related reference

ALTER TABLE (Db2 SQL)
RUNSTATS TABLESPACE syntax and options (Db2 Utilities)
Statistics profile syntax (Db2 Utilities)

DSNU612I ***csect-name* SYSTABLESPACE CATALOG STATISTICS FOR *tablespace-name* NACTIVE = *nactive-value* NACTIVEF = *nactivef-value***

Explanation

The RUNSTATS utility issues this message to report the statistics collected for the specified table space.

csect-name
The name of the control section that issued the message.

tablespace-name
The name of the table space.

nactive-value
The number of active pages in the table space, as an integer value.

nactivef-value
The number of active pages in the table space, as a floating point value.

This message is routed to SYSPRINT.

System action

RUNSTATS processing continues.

User response

No action is required.

Severity

0 (informational)

Related reference

Statistics used for access path selection (Db2 Performance)
RUNSTATS (Db2 Utilities)
SYSTABLESPACE catalog table (Db2 SQL)

DSNU613I ***csect-name* SYSTABLEPART CATALOG STATISTICS FOR *tablespace-name* PARTITION *part-number***

Explanation

The RUNSTATS utility issues this message on multiple lines to report the statistics values that were collected:

```
CARD = card-value
CARDF = cardf-value
NEARINDREF = nearindref-value
FARINDREF = farindref-value
PERCACTIVE = peractive-value
PERCDROP = percdrop-value
PAGESAVE = pagesave-value
SPACE = space-value
SPACEF = spacef-value
PQTY = pqty-value
SQTY = sqty-value
```

```
DSNUM = dsnum-value
EXTENTS = extents-value
```

csect-name
The name of the control section that issued the message.

part-number
The value that identifies the partition or data set. A 0 value means that the statistics apply to the entire table space. A non-zero value indicates that the statistics apply to that partition that is identified by the value.

card-value
The number of rows in the reported partition number, as an integer value.

cardf-value
The number of rows in the reported partition number, as a floating point value.

nearindref-value
The number of rows that were relocated near their original page.

farindref-value
The number of rows that were relocated far from their original page.

peractive-value
The percentage of space occupied by actual data from active tables.

percdrop-value
The percentage of space occupied by rows of data from dropped tables.

pagesave-value
The percentage of pages saved in the table space or partition by using data compression.

space-value
The space currently allocated for all extents, measured in kilobytes, as an integer value.

spacef-value
The space currently allocated for all extents, measured in kilobytes, as a floating point value.

pqty-value
The primary space allocation for the data set in 4K blocks.

sqty-value
The secondary space allocation for the data set in 4K blocks.

dsnum-value
The number of data sets.

extents-value
The number of extents for the last data set of the object.

This message is routed to SYSPRINT.

System action

RUNSTATS processing continues.

User response

No action is required.

Severity

0 (informational)

Related reference

Statistics used for access path selection (Db2 Performance)
RUNSTATS (Db2 Utilities)
SYSTABLESPACE catalog table (Db2 SQL)

DSNU614I ***csect-name* SYSTABLES CATALOG STATISTICS FOR *table-nametable-name***

Explanation

The RUNSTATS utility issues this message on multiple lines to report the statistics collected for the specified table.

```
CARD = card-value
CARDF = cardf-value
NPAGES = npages-value
NPAGESF = npagesf-value
PCTPAGES = pctpages-value
PCTROWCOMP = pctrowcomp-value
AVGROWLEN = avgrowlen-value
SPACEF = spacef-value
```

csect-name
The name of the control section that issued the message.

table-name
The name of the table.

card-value
The number of rows in the table.

For large table spaces, the value of CARD is set to -1.

cardf-value
The number of rows in the table, as a floating point value.

For large table spaces, the value of CARDF is set to -1.

npages-value
The number of pages on which rows of the table appear.

pctpages-value
The percentage of total pages of the table space that contain rows from this table.

pctrowcomp-value
The percentage of rows compressed within the total number of active rows in the table.

avgrowlen-value
The total number of bytes divided by the number of rows.

spacef-value
The space currently allocated for all extents, measured in kilobytes.

This message is routed to SYSPRINT.

System action

RUNSTATS processing continues.

User response:

User response

No action is required.

Severity

0 (informational)

Related reference
Statistics used for access path selection (Db2 Performance)
RUNSTATS (Db2 Utilities)
SYSTABLES catalog table (Db2 SQL)

DSNU615I *csect-name* SYSCOLUMNS CATALOG STATISTICS FOR *column-name*

Explanation

The RUNSTATS utility issues this message on multiple lines to report the statistics collected for column *column-name*. Message DSNU619I is issued to identify the table.

```
COLCARD    =  colcard-value
COLCARDF   = colcardf-value
HIGH2KEY   = high2key
LOW2KEY    = low2key
```

csect-name
The name of the control section that issued the message.

column-name
The name of the column.

colcard-value
The number of distinct values in the column. For a large table spaces, the value of COLCARD is set to -1.

colcardf-value
The number of distinct values in the column, as a floating point value.

high2key-value
The second highest value of the column.

low2key-value
The second lowest value of the column.

For empty partitions, RUNSTATS sets the values for HIGH2KEY and LOW2KEY to null (''X).

System action

Processing continues.

User response

No action is required.

Related reference
Statistics used for access path selection (Db2 Performance)
RUNSTATS (Db2 Utilities)
SYSINDEXES catalog table (Db2 SQL)

DSNU616I *csect-name* SYSCOLDIST CATALOG STATISTICS FOR *column-name*, *column-name*, *column-name* ...

```
CARDINALITY = cardinality
FREQUENCY   COLVALUE
frequency   X'hex-string'
frequency   X'hex-string'
..            ..
frequency   X'hex-string'
```

Explanation

The RUNSTATS utility issues this message to report the statistics collected for the indexed column *column-name*. If more than one column is listed, then the statistics collected and the column values reported represent the concatenation of those columns.

The value for CARDINALITY is the number of distinct values for the listed columns. This statistic appears only if the KEYCARD option was specified.

The values under FREQUENCY are the same as those that are inserted into the Db2 catalog. Consider each 'frequency' as a four-digit number with an implied decimal point two places to the left of the final digit. The resulting number is the percentage of total rows in the table that contain a particular value for the named index columns.

Frequency is associated with the occurrence of a single value which is listed under COLVALUE.

Frequencies for the most frequent values are collected by default, or if the FREQVAL option is specified and given a COUNT value greater than zero. If the default is taken, then the ten most frequently occurring values are reported in descending order of frequency.

- If fewer than ten values appear, then there are fewer than ten distinct values in the index.
- If no values appear, then the values are uniformly distributed.
- If frequencies appear but column values do not, then the invoker of RUNSTATS is not authorized to read the table. Message DSNU619I is issued to identify the table.

This message is routed to SYSPRINT.

System action

Processing continues.

User response:
No action.

Severity

0 (informational)

Related reference

Statistics used for access path selection (Db2 Performance)

RUNSTATS (Db2 Utilities)

SYSCOLDIST catalog table (Db2 SQL)

Related information

DSNU619I

csect-name - USER *auth_id* DOES NOT HAVE PRIVILEGE ON TABLE *table_name*

DSNU617I *csect-name* SYSINDEXES CATALOG STATISTICS FOR *index-name*

Explanation

The RUNSTATS utility issues this message on multiple lines to report the statistics collected for the specified index.

```
CLUSTERED = clustered-value
CLUSTERRATIO = clusterratio-value
CLUSTERRATIOF = clusterratiof-value
FIRSTKEYCARD = firstkeycard-value
FIRSTKEYCARDF = firstkeycardf-value
FULLKEYCARD = fullkeycard-value
FULLKEYCARDF = fullkeycardf-value
NLEAF = nleaf-value
NLEVELS = nlevels-value
SPACEF = spacef-value
DATAREPEATFACTORF = datarepeatfactorf-value
```

csect-name
The name of the control section that issued the message.

index-name
The name of the index.

clustered
Whether the table is actually clustered by this index (YES or NO)

clusterratio-value
The percentage of data rows that are in clustering order for this index, as an integer value

clusterratiof-value
A number between 0 and 1 that when multiplied by 100 gives the percentage of data rows in the partition that are in clustering order for this index, as a floating point value

firstkeycard-value
The number of distinct values of the first key column, as an integer value

firstkeycardf-value
The number of distinct values of the first key column, as a floating point value

fullkeycard-value
The number of distinct values of the key, as an integer value

fullkeycardf-value
The number of distinct values of the key, as a floating point value

nleaf-value
The number of active leaf pages in the index

nlevels-value
The number of levels in the index tree

spacef-value
The space currently allocated for all extents, measured in kilobytes.

datarepeatfactorf-value
The anticipated number of data pages repeatedly scanned, following index key order

For a LARGE table space, the values of FIRSTKEYCARD and FULLKEYCARD are set to -1. RUNSTATS uses floating point fields to report these statistics.

This message is routed to SYSPRINT.

System action

Processing continues.

User response

No action is required.

Severity

0 (informational)

Related reference

Statistics used for access path selection (Db2 Performance)
RUNSTATS (Db2 Utilities)
SYSINDEXES catalog table (Db2 SQL)

DSNU618I *csect-name* SYSINDEXPART CATALOG STATISTICS FOR *index-name* PARTITION *part-number*

Explanation

The RUNSTATS utility issues this message on multiple lines to report the statistics collected for the specified index.

```
CARD = card-value
CARDF = cardf-value
NEAROFFPOS = nearoffpos-value
NEAROFFPOSF = nearoffposf-value
FAROFFPOS = faroffpos-value
FAROFFPOSF = faroffposf-value
LEAFDIST = leafdist-value
SPACEF = spacef-value
DSNUM = dsnum-value
EXTENTS = extents-value
LEAFNEAR = leafnear-value
LEAFFAR = leaffar-value
PSEUDO_DEL_ENTRIES= psuedo_del_entries-value
```

csect-name
The name of the control section that issued the message.

index-name
The name of the index.

part-number
The value that identifies the partition or data set. If this value equals 0, the statistics apply to the entire index. If it is a non-zero value, the statistics apply to the specified partition of the index.

card-value
The number of rows in the partition or index, as an integer value. For large table spaces, the value of CARD is set to -1.

cardf-value
The number of rows in the partition or index, as a floating point value.

nearoffpos-value
The number of rows pointed to that are near but not at their optimal positions, as an integer value. For large table spaces, the value of NEAROFFPOS is set to -1.

nearoffposf-value
The number of rows pointed to that are near but not at their optimal positions, as a floating point value.

faroffpos-value
The number of rows pointed to that are far from their optimal positions, as an integer value. For large table spaces, the value of FAROFFPOS is set to -1.

faroffposf-value
The number of rows pointed to that are far from their optimal positions, as a floating point value.

leafdist-value
100 times the average distance in page IDs between successive leaf pages during a sequential access of the index.

spacef-value
The space currently allocated for all extents, measured in kilobytes.

dsnum-value
The number of data sets.

extents-value
The number of extents for the last data set of the object.

leafnear-value
The number of leaf pages physically near the previous leaf page for successive active leaf pages.

leaffar-value
The number of leaf pages located physically far away from the previous leaf pages for successive active leaf pages accessed in an index scan.

psuedo_del_entries-value
The number of entries that are logically deleted.

This message is routed to SYSPRINT.

System action

Processing continues.

User response

No action is required.

Related reference

Statistics used for access path selection (Db2 Performance)
RUNSTATS (Db2 Utilities)
SYSINDEXPART catalog table (Db2 SQL)

DSNU619I *csect-name* - USER *auth_id* DOES NOT HAVE PRIVILEGE ON TABLE *table_name*

Explanation

The RUNSTATS utility issues this message to report that authorization ID 'auth_id' does not have privilege on table 'table_name'. Some column values reported

by messages DSNU615I, DSNU616I, DSNU625I, and DSNU626I contain the null value.

System action

RUNSTATS processing continues.

User response

To obtain the key values, the user must be granted authority on the table. The RUNSTATS utility can be rerun with the report option.

Severity

0 (informational)

DSNU620I ***csect-name*** **RUNSTATS CATALOG STATISTICS STATSTIME =** ***timestamp***

Explanation

The RUNSTATS utility issues the DSNU620I message, when utility processing completes, to report the timestamp value when statistics were collected or reset.

csect-name
The name of the control section that issued the message.

timestamp
The timestamp value of the statistics. The same value is common to all of the statistics that were updated by a single invocation of RUNSTATS.

System action

Processing continues.

User response

No action is required.

Severity

0 (informational)

Related reference

Statistics used for access path selection (Db2 Performance)

RUNSTATS (Db2 Utilities)

DSNU621I ***csect-name*** **RUNSTATS COMMIT/ROLLBACK FAILED**

Explanation

The RUNSTATS utility updated the catalog with gathered statistics and has tried either to commit those changes or to perform rollback processing to remove them following an error. The commit or rollback failed.

System action

RUNSTATS processing is terminated. Subsequent utility control statements in the utility job step are executed.

System programmer response

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Problem determination

This is an internal error.

Severity

8 (error)

DSNU622I ***csect-name*** **CATALOG ACCESS FOR** ***object-name*** **NOT SUCCESSFUL, REASON=***reason-code*

Explanation

A catalog access error for object *object-name* and reason code *reason-code* caused the catalog update, insert, or select to fail for the object when inline statistics was employed.

User response

Check for and resolve any restrictive states on the catalog object, and then run the RUNSTATS utility to collect statistics for the object.

Severity

4 (warning)

Related tasks

Collecting statistics by using Db2 utilities (Db2 Performance)

DSNU623I ***csect-name - catalog-table-name*** **CATALOG NOT UPDATED WITH AGGREGATE STATISTICS FOR** ***object-name*** **BECAUSE SOME PARTITIONS HAVE NO VALID STATISTICS**

Explanation

Aggregate statistics were requested, but partition statistics do not exist for every partition. Without partition statistics, the aggregate statistics cannot be calculated. The statistics for *object-name* are not updated in the specified Db2 catalog table. If you specified UPDATE NONE, then this message will not show up.

One possible cause for this message is that someone altered the length of a varying-length column and then tried to run RUNSTATS with the PART option.

System action

Processing continues.

User response

Run the RUNSTATS utility to collect statistics for:

- The entire table space, table, column or index, or
- Every partition.

Severity

4 (warning)

DSNU624I ***csect-namecsect-name* SYSTABSTATS CATALOG STATISTICS FOR *table-name* PARTITION *part-number***

Explanation

The RUNSTATS utility issues this message on multiple lines to report the statistics collected for the specified partition of the table space that contains the table.

```
CARD = card-value
CARDF = cardf-value
NPAGES  = npages-value
PCTPAGES = pctpages-value
NACTIVE = nactive-value
PCTROWCOMP = pctrowcomp-value
```

card-value
The number of rows in the table space partition, as an integer value

cardf-value
The number of rows in the table space partition, as a floating point value

npages-value
The number of pages on which rows of the table space partition appear

pctpages-value
The percentage of total pages of the table space partition that contain rows from this table

nactive-value
The number of active pages in the table space partition

pctrowcomp-value
The percentage of rows compressed within the total number of active rows in the partition

This message is routed to SYSPRINT.

System action

Processing continues.

User response

No action is required.

Related reference
Statistics used for access path selection (Db2 Performance)
RUNSTATS (Db2 Utilities)
SYSTABSTATS catalog table (Db2 SQL)

DSNU625I ***csect-name* SYSCOLSTATS CATALOG STATISTICS FOR *column-name* PARTITION *part-num***

COLCARD = *cardinality*
HIGHKEY = *highkey*
HIGH2KEY = *high2key*
LOW2KEY = *low2key*
LOWKEY = *lowkey*

Explanation

The RUNSTATS utility issues this message to report the statistics collected for column *column-name* partition *part-num* of a table. Message DSNU619I is issued to identify the table.

cardinality
The number of distinct values in the column for the partition

highkey
The highest value of the column in the partition

high2key
The second highest value of the column in the partition

low2key
The second lowest value of the column in the partition

lowkey
The lowest value of the column in the partition

For empty partitions, RUNSTATS set the values for *highkey*, *high2key*, *low2key*, and *lowkey* to null ("X).

This message is routed to SYSPRINT.

User response:
No action.

Severity

0 (informational)

Related reference

Statistics used for access path selection (Db2 Performance)

RUNSTATS (Db2 Utilities)

SYSCOLSTATS catalog table (Db2 SQL)

DSNU626I *csect-name* SYSCOLDISTSTATS CATALOG STATISTICS FOR *column-name*, *column-name*, *column-name* ... PARTITION *part-num*

```
CARDINALITY = cardinality
FREQUENCY   COLVALUE
frequency   X'hex-string'
frequency   X'hex-string'
..           ..
frequency   X'hex-string'
```

Explanation

The RUNSTATS utility issues this message to report the statistics collected for the indexed column *column-name* partition *part-num*. If more than one column is listed, then the statistics collected and the column values reported represent the concatenation of those columns.

The value for CARDINALITY is the number of distinct values for the listed columns. This statistic appears only if the KEYCARD option was specified.

The values under FREQUENCY are the same as those that are inserted into the Db2 catalog. Consider each 'frequency' as a four-digit number with an implied decimal point two places to the left of the final digit. The resulting number is the percentage of total rows in the table that contain a particular value for the named index columns.

Frequency is associated with the occurrence of a single value which is listed under COLVALUE.

Frequencies for the most frequent values are collected by default, or if the FREQVAL option is specified and given a COUNT value greater than zero. If the default is taken, then the ten most frequently occurring values, plus the lowest and highest values in the partition (if not already included in the ten greatest frequencies), are reported in descending order of frequency.

- If fewer than ten values appear, then there are fewer than ten distinct values in the index.
- If no values appear, then the values are uniformly distributed.
- If frequencies appear but column values do not, then the invoker of RUNSTATS is not authorized to read the table. Message DSNU619I is issued to identify the table.

This message is routed to SYSPRINT.

System action

Processing continues.

User response:
No action.

Severity

0 (informational)

Related reference

Statistics used for access path selection (Db2 Performance)

RUNSTATS (Db2 Utilities)

SYSCOLDISTSTATS catalog table (Db2 SQL)

Related information

DSNU619I

csect-name - USER *auth_id* DOES NOT HAVE PRIVILEGE ON TABLE *table_name*

DSNU627I *csect-name* SYSINDEXSTATS CATALOG STATISTICS FOR *index-name* PARTITION *part-number*

Explanation

The RUNSTATS utility issues this message on multiple lines to report the statistics collected for the specified partition of the specified index.

```
CLUSTERRATIO =clusterratio-value
CLUSTERRATIOF = clusteratiof-value
FIRSTKEYCARD = firstkeycard-value
FIRSTKEYCARDF = firstkeycardf-value
FULLKEYCARD = fullkeycard-value
FULLKEYCARDF = fullkeycardf-value
NLEAF = nleaf-value
NLEVELS = nlevels-value
KEYCOUNT = keycount-value
KEYCOUNTF = keycountf-value
DATAREPEATFACTORF= datarepeatfactorf-value
```

csect-name
The name of the control section that issued the message.

index-name
The name of the index.

part-number
The value that identifies the partition or data set.

clusterratio-value
The percentage of data rows in the partition that are in clustering order for this index, as an integer value.

clusterratiof-value
The percentage of data rows in the partition that are in clustering order for this index, as a floating point value.

firstkeycard-value
The number of distinct values of the first key column in the partition, as an integer value.

firstkeycardf-value
The number of distinct values of the first key column in the partition, as a floating point value.

fullkeycard-value
The number of distinct values of the key in the partition, as an integer value.

fullkeycardf-value
The number of distinct values of the key in the partition, as a floating point value.

nleaf-value
The number of active leaf pages in the index partition.

nlevels-value
The number of levels in the index tree in the partition.

keycount-value
The number of index keys (entries) in the partition, as an integer value.

keycountd-value
The number of index keys (entries) in the partition, as a floating point value.

datarepeatfactorf-value
The anticipated number of data pages repeatedly scanned, following index key order.

This message is routed to SYSPRINT.

System action

Processing continues.

User response

No action is required.

Severity

0 (informational)

Related reference
Statistics used for access path selection (Db2 Performance)
RUNSTATS (Db2 Utilities)
SYSINDEXSTATS catalog table (Db2 SQL)

DSNU628I ***csect-name*** **STATISTICS WILL NO LONGER BE COLLECTED ON RESTART**

Explanation

Since inline statistics is not restartable, Statistics may not be collected on the object that was being processed during the restart of the LOAD/REORG utility. If a list of objects is being processed, then objects that are not processed yet will still have statistics collected. The error message will be issued on restart of a LOAD/REORG utility with the STATISTICS keyword specified.

User response

Run the runstats utility on the object after the utility execution unless the DSNU620I message is present, indicating that the statistics were collected.

Severity

4 (warning)

DSNU629I ***csect-name*** **INLINE STATISTICS IS NOT SUPPORTED FOR** ***object-name***

Explanation

The REORG TABLESPACE utility or REBUILD INDEX utility with the STATISTICS keyword was run for a catalog or directory table space. The collection of inline statistics during REORG TABLESPACE or REBUILD INDEX is not supported for that table space.

tablespace-name
The name of the table space.

System action

Processing continues.

Inline statistics are not collected.

User response

Remove the keyword STATISTICS from the utility job statement, and rerun the utility. Then run the RUNSTATS utility to collect statistics.

Severity

4 (warning)

Related reference
REBUILD INDEX (Db2 Utilities)
REORG TABLESPACE (Db2 Utilities)

DSNU630I ***csect-name*** **- SYSLOBSTATS CATALOG STATISTICS FOR** ***LOB table space*** **AVGSIZE =** ***avgsize*** **FREESPACE =** ***freespace*** **ORGRATIO =** ***orgratio***

Explanation

The RUNSTATS utility issues this message to report statistics collected for the LOB table space.

AVGSIZE
Average size of a LOB in the LOB table space.

FREESPACE
Amount of free space in the LOB table space.

ORGRATIO
The percentage of organization in the LOB table space. The following values indicate the state of the LOB table space:

100.00
The table space is completely organized or it is empty.

1
The table space is disorganized.

0.00
The table space is completely disorganized.

System action

RUNSTATS processing continues.

DSNU632I ***csect-name*- SYSCOLDIST CATALOG HISTOGRAM STATISTICS FOR *column-name*, *column-name*, ### QUANTILE *quan-num* LOWVALUE = X'*hex-value*' HIGHVALUE = X'*hex-value*' CARDF = *cardf-value* FREQUENCYF = *frequencyf-value***

Explanation

The RUNSTATS utility issues this message to report the histogram statistics that are collected for the specified column or column group for each quantile, as indicated by *quan-num*.

For single-column, the LOWVALUE and HIGHVALUE represent the column value, low bound and high bound, for each quantile range. For column-group, the LOWVALUE and HIGHVALUE represent the concatenation of those columns.

CARDF represents the number of distinctive values in each quantile. For column group, CARDF represents the number of distinctive combinations of that column group in each quantile.

FREQUENCYF represents the percentage of rows in each quantile.

If the total number of distinctive values for that column or column group is less than the specified number of quantiles, then the quantiles collected is up to the number of distinctive values.

This message is routed to SYSPRINT.

System action

Processing continues.

User response

No action is required.

Severity

0 (informational)

Related reference
Statistics used for access path selection (Db2 Performance)
RUNSTATS (Db2 Utilities)
SYSCOLDIST catalog table (Db2 SQL)

DSNU633I ***csect-name*- HISTOGRAM STATISTICS NOT COLLECTED FOR INDEX WITH MIXED ORDERING ON COLUMNS**

Explanation

The RUNSTATS utility issues this message to warn users that no histogram statistics are collected for the index key columns of mixed order.

System action

Processing continues with the histogram option ignored.

Severity

4 (warning)

DSNU634I ***csect-name*- NUMBER SPECIFIED FOR NUMQUANTILES EXCEEDS MAXIMUM**

Explanation

The RUNSTATS utility issues this message to warn that the number of quantiles that the user specified exceeds the maximum limit of 100.

System action

Processing continues with the maximum limit as the number of quantiles.

Severity

4 (warning)

DSNU635I **COLGROUP STARTING WITH *first-column-name* IS TOO LONG**

Explanation

Complete statistics cannot be collected, because of one the following situations:

- For a single-column COLGROUP, the length of data exceeds 2000 bytes.
- For a single-column COLGROUP, the HISTOGRAM keyword is specified and the defined maximum length of the COLGROUP exceeds 2000 bytes.
- For a multi-column COLGROUP, the defined maximum length of the COLGROUP exceeds 2000 bytes.

The 2000-byte limits are based on the maximum length of COLVALUE column of the SYSIBM.SYSCOLDIST catalog table.

System action

For a single-column COLGROUP, the job step continues with limited statistics collection for the COLGROUP. If the HISTOGRAM keyword is specified, histogram statistics are not collected. The message is issued with return code 4 (warning).

For multi-column COLGROUP, no statistics are collected, utility processing terminates, and this message is issued with return code 8 (error).

User response

If the limited statistics collection is acceptable for the single-column COLGROUP, no action is required. Otherwise, alter the COLGROUP specification such that the maximum length of the COLGROUP does not exceed 2000 bytes.

Severity

4 (warning) or 8 (error)

Related reference

RUNSTATS (Db2 Utilities)

SYSCOLDIST catalog table (Db2 SQL)

DSNU636I ***csect-name*** **SYSCOLDISTSTATS CATALOG HISTOGRAM STATISTICS FOR** ***column-name*****,** ***column-name*****, ### PARTITION** ***part-num*** **QUANTILE** ***quan-num*** **LOWVALUE = X'***hex-value***' HIGHVALUE = X'***hex-value***' CARDF = *cardf-value* FREQUENCYF =** ***frequencyf-value***

Explanation

The RUNSTATS utility issues this message to report the histogram statistics that are collected for the specified column or column group for each quantile, as indicated by *quan-num*, for a partition, as indicated by *part-num*.

For single-column, the LOWVALUE and HIGHVALUE represent the column value, low bound and high bound, for each quantile range. For column-group, the LOWVALUE and HIGHVALUE represent the concatenation of those columns.

CARDF represents the number of distinctive values in each quantile. For column group, CARDF represents the number of distinctive combinations of that column group in each quantile.

FREQUENCYF represents the percentage of rows in each quantile.

If the total number of distinctive values for that column or column group is less than the specified number of quantiles, then the quantiles collected is up to the number of distinctive values.

This message is routed to SYSPRINT.

System action

Processing continues.

User response

No action is required.

Severity

0 (informational)

Related reference

Statistics used for access path selection (Db2 Performance)

RUNSTATS (Db2 Utilities)

SYSCOLDISTSTATS catalog table (Db2 SQL)

DSNU637I ***csect-name*** **NUMBER OF** ***option-name*** **SPECIFIED EXCEEDS MAXIMUM LIMIT ALLOWED OF** ***maximum-allowed***

Explanation

The utility control statement references too many instances of an option.

csect-name
The name of the control section that issued the message.

option-name
The name of the option.

maximum-allowed
The maximum number of instances of the indicated option that are permitted.

System action

Utility processing ends.

User response

Reduce the number of *option-name* options that are used by the utility control statement.

Severity

8 (error)

DSNU638I ***csect-name*** **- UTILITY NOT ALLOWED TO RUN ON TABLESPACE =** ***tablespace-name*** **IN ROSHARE READ DATABASE =** ***database-name***

Explanation

An attempt to execute STOSPACE utility on a table space defined in a ROSHARE READ database failed. The STOSPACE utility is only allowed to execute in a ROSHARE OWNER or a nonshared database.

csect-name
The name of the control section that issued the message.

tablespace-name
The name of the table space.

database-name
The name of the database.

System action

Processing continues to the next table space or index space in the storage group, if any.

User response

Resubmit the utility job on the system in which the database was defined with the ROSHARE OWNER attribute.

Severity

4 (warning)

DSNU639I ***csect-name*** **- UTILITY NOT ALLOWED TO RUN ON INDEX SPACE =** ***index-space-name*** **IN ROSHARE READ DATABASE =** ***database-name***

Explanation

An attempt to execute the STOSPACE utility on an index space defined in a ROSHARE READ database failed. The STOSPACE utility is only allowed to execute in a ROSHARE OWNER or nonshared database.

csect-name
The name of the control section that issued the message.

index-space-name
The name of the index space.

database-name
The name of the database.

System action

Processing continues to the next table space or index space in the storage group, if any.

User response

Resubmit the utility job on the system in which the database was defined with the ROSHARE OWNER attribute.

Severity

4 (warning)

DSNU640I ***csect-name*** **DATA SET=** ***nnn*** **OF TABLESPACE=** ***tttttttt*** **IN DATABASE=** ***dddddddd*** **HAS BEEN MIGRATED BY HSM**

Explanation

The STOSPACE utility has found that a Db2 data set has been migrated by the Data Facility Hierarchical Storage Manager. The amount of storage space used cannot be determined for DATA SET 'nnn' of TABLESPACE 'tttttttt' in DATABASE 'dddddddd'. The space allocation information in the catalog will not include the storage used by the migrated data set.

System action

Processing continues to the next data set in the storage group, if any.

System programmer response

If required, the data set may be recalled using HSM, and the STOSPACE utility may be run again.

Severity

0 (informational)

DSNU641I ***csect-name*** **DATA SET=** ***nnn*** **OF INDEXSPACE=** ***iiiiiiii*** **IN DATABASE=** ***dddddddd*** **HAS BEEN MIGRATED BY HSM**

Explanation

The STOSPACE utility has found that a Db2 data set has been migrated by the Data Facility Hierarchical Storage Manager. The amount of storage space used cannot be determined for DATA SET 'nnn' of INDEXSPACE 'iiiiiiii' in DATABASE 'dddddddd'. The space allocation information in the catalog will not include the storage used by the migrated data set.

System action

Processing continues to the next data set in the storage group, if any.

System programmer response

If required, the data set may be recalled using HSM, and the STOSPACE utility may be run again.

Severity

0 (informational)

DSNU642I ***csect-name*** **UNABLE TO ACCESS DBD FOR DATABASE =** ***dddddddd*****, TABLESPACE =** ***tttttttt***

Explanation

A database descriptor control block could not be accessed by the STOSPACE utility. Information in the DBD is required before space allocation data can be obtained from the appropriate ICF catalog. Storage space used by table space 'tttttttt' in database 'dddddddd' cannot be determined.

System action

Processing continues with the next storage group.

System programmer response

Determine if the reason for the DBD unavailability may require system corrective action.

User response

Determine the cause for unavailability. The database may be stopped or the DBD may be marked as invalid. The -DISPLAY DATABASE command can be used to determine the status.

Problem determination

A DSNT501I message may have been sent to the operator console. If so, see the problem determination section for message DSNT501I.

Severity

4 (warning)

DSNU643I ***csect-name*** **UNABLE TO ACCESS DBD FOR DATABASE =** ***dddddddd*****, INDEXSPACE =** ***tttttttt***

Explanation

A database descriptor control block could not be accessed by the STOSPACE utility. Information in the DBD is required before space allocation data can be obtained from the appropriate ICF catalog. Storage space used by index space 'tttttttt' in database 'dddddddd' cannot be determined.

System action

Processing continues with the next storage group.

System programmer response

Determine if the reason for the DBD unavailability may require system corrective action.

User response

Determine the cause for unavailability. The database may be stopped or the DBD may be marked as invalid. The -DISPLAY DATABASE command can be used to determine the status.

Problem determination

A DSNT501I message may have been sent to the operator console. If so, see the problem determination section for message DSNT501.

Severity

4 (warning)

DSNU644I ***csect-name*** **USER** ***user-name*** **NOT AUTHORIZED FOR STOSPACE UTILITY**

Explanation

Utility processing for the user indicated on the job statement failed, because the user is not authorized to execute the STOSPACE utility.

System action

Utility processing is terminated without invoking the requested utility or utilities.

System programmer response

If the USER specified on the job statement is incorrect, correct it, and resubmit the job. To run the STOSPACE utility, the user must either have SYSADM authority or have been granted the STOSPACE privilege. Use the SQL GRANT command to give the user the required authority.

User response

Contact the systems programmer for assistance with your security classification.

Severity

8 (error)

DSNU645I ***csect-name*** **NO STORAGE GROUPS NAME FOUND**

Explanation

You requested the STOSPACE utility to report on all storage groups, but no storage group was found.

System action

This message indicates completion of the STOSPACE utility. Processing continues to the next utility statement in the utility job step, if any. If not, the utility job step is normally terminated. Resources are released to their prior availability state. The UTILID of the utility job step becomes available for reuse.

System programmer response

This message indicates either that no storage groups were defined by the installation process (or by subsequent SQL procedures) or they have all been dropped. If this is an error, the required storage groups must be re-created with the CREATE STOGROUP SQL statement.

User response

This message indicates that there are no storage groups defined. Consult the system programmer to determine the reason for this condition.

Severity

4 (warning)

This condition does not prevent subsequent processing.

DSNU646I ***csect-name*** **STORAGE GROUP NAME *nnnnnnnn* NOT FOUND**

Explanation

This message is issued by STOSPACE when one of the requested storage groups is not found.

The following circumstances may exist:

1. When an inconsistency occurs between SYSIBM.SYSSTOGROUP at the beginning of STOSPACE execution and SYSIBM.SYSSTOGROUP during or at the end of processing. The inconsistency may be due to a storage group being dropped during the processing of STOSPACE utility.
2. The storage group name is misspelled.

System action

Processing proceeds normally to the next storage group if any.

User response

Verify the existence or spelling of the storage group names by referring to SYSIBM.SYSSTOGROUP. Submit another request with the correct storage group designated.

Severity

4 (warning)

DSNU647I ***csect-name*** **UNAVAILABLE REASON X *reason-code* UNAVAILABLE TYPE X *type-code*, TABLESPACE NAME= *table-space-name* NOT FOUND**

Explanation

The indicated table space was not available for processing by the STOSPACE utility. The reason for its unavailability is given in 'reason-code'. The type of unavailability is given in 'type-code'.

This message may be issued when an inconsistency between SYSIBM.SYSTABLESPACEand SYSIBM.SYSTABLEPART has been detected. The inconsistency may be due to a table space being dropped during the processing of the STOSPACE utility.

System action

Processing continues to the next table space in the storage group, if any.

System programmer response

Determine if the 'reason-code' and 'type-code' require system corrective action.

User response

Use the 'reason-code' and 'type-code' to determine why the resource was unavailable. When the problem has been resolved, resubmit the STOSPACE request.

Problem determination

See the Problem Determination section for message DSNT500I.

Severity

4 (warning)

DSNU648I ***csect-name*** **UNAVAILABLE REASON X** ***reason code*****, UNAVAILABLE TYPE X** ***type-code*****, INDEX NAME=***index-name* **NOT FOUND**

Explanation

The indicated index was not available for processing by the STOSPACE utility. The reason for its unavailability is given in 'reason-code'. The type of unavailability is given in 'type-code'.

This message may be issued when an inconsistency between SYSIBM.SYSINDEXES and SYSIBM.SYSINDEXPART has been detected. The inconsistency may be due to an index being dropped during the processing of the STOSPACE utility.

System action

Processing continues to the next index in the storage group, if any.

System programmer response

Determine if the 'reason-code' and 'type-code' require system corrective action.

User response

Use the 'reason-code' and 'type-code' to determine why the resource was unavailable. When the problem has been resolved, resubmit the STOSPACE request.

Problem determination

See the Problem Determination section for message DSNT500I.

Severity

4 (warning)

DSNU650I ***csect-name control-statement-text***

Explanation

Each control statement is returned to the invoker as a part of the normal output. If an error occurred while processing the statement, a separate error message follows this message.

csect-name
The name of the control section that issued the message.

control-statement-text
A portion of the text of the utility control statement. Examples include INTO TABLE statements for the LOAD utility and WHEN clauses, among other items.

System action

The processing of the utility request continues normally.

Severity

0 (informational)

Related concepts
Utility control statements (Db2 Utilities)
Statistics profiles (Db2 Performance)
Related reference
LOAD (Db2 Utilities)
Related information
DSNU050I
csect-name utility-statement

DSNU651I ***csect-name*** **SET NOCOPYPEND OPERATION SUCCESSFUL**

Explanation

This message reports the successful completion of the REPAIR SET TABLESPACE NOCOPYPEND utility operation. The COPY PENDING restriction has been removed from the specified table space.

System action

The REPAIR SET statement has completed normally.

Severity

0 (informational)

DSNU652I ***csect-name*** **VERIFY OPERATION SUCCESSFUL**

Explanation

This message is issued during REPAIR utility processing in response to a VERIFY control statement. It indicates the verification requested was successful,

permitting a subsequent REPLACE request to take effect.

System action

The requested verification was successful. If this is the only verification required for the subsequent REPLACE control statement, the REPLACE control statement takes effect. If there are other verification control statements, they must also complete successfully before the subsequent REPLACE control statement takes effect.

Severity

0 (informational)

DSNU653I ***csect-name*** **REPLACE OPERATION AT OFFSET** ***hex-data*** **WITH DATA** ***hex-data*** **FAILED. ATTEMPTED TO REPLACE CRITICAL NON-DATA INFORMATION ON THE PAGE** ***page-num*** **WITH INCORRECT INFORMATION.**

Explanation

The REPAIR utility job with the LOG YES option was unable to replace certain critical, nondata information in the page for one of these reasons:

- Some critical information on any page at the indicated offset cannot be replaced by this method.
- The page is a header page and some of the information at the indicated offset cannot be replaced by this method.
- The information can be replaced only by using the LOG NO option.

System action

REPAIR resumes executing at the next LOCATE statement. Later control statements in the same LOCATE block are not executed.

User response

Correct the REPAIR control statements and resubmit the request in a new utility job step.

User response

Check the OFFSET option on the REPLACE statement to be sure it does not cause critical information to be replaced. If the replacement is intentional, use the LOG NO option.

Severity

8 (error)

DSNU654I ***csect-name*** **VERIFY OPERATION FAILED, DATA IS** ***hex-data***

Explanation

The verify operation requested on the control statement failed. *hex-data* contains the data value that failed the verify operation.

System action

All REPAIR REPLACE actions subject to the current LOCATE scope are ignored. Processing continues at the next LOCATE request, if any.

User response

Determine why the data (as reported in the message) does not match the expectations of VERIFY option. Make the appropriate correction, and resubmit the REPAIR request in a new utility job step.

Problem determination

The REPAIR DUMP option can help you determine the correct verification data.

Severity

4 (warning)

Related concepts

Using VERIFY with REPLACE and DELETE operations (Db2 Utilities)

Related reference

REPAIR (Db2 Utilities)

Syntax and options of the REPAIR control statement (Db2 Utilities)

DSNU655I ***csect-name*** **DELETE OPERATION SUCCESSFUL**

Explanation

This message is issued during the REPAIR utility in response to a DELETE control statement.

System action

The data record specified on the previous LOCATE statement and all of its related INDEX entries have been deleted from the system. Processing continues.

Severity

0 (informational)

DSNU656I ***csect-name*** **REPLACE OPERATION SUCCESSFUL, DATA WAS** ***hex-data***

Explanation

This message is issued by the REPAIR utility in response to a REPLACE control statement request. The message indicates that replacement of the data occurred and that the replaced data had the indicated hexadecimal value ('hex-data').

System action

The REPAIR utility located the indicated record, performed all requested verifications, and replaced the data in the record at the indicated offset with the new data as defined by the REPLACE control statement.

System programmer response

If a changed record is recovered before an image copy is made, and the REPAIR utility was run with LOG NO, the repair must be reapplied. If the REPAIR utility was run with LOG YES, no image copy is required before recovering the data after the repair.

Severity

0 (informational)

DSNU657I ***csect-name*** **REPLACE RESET OPERATION SUCCESSFUL**

Explanation

This message is issued by the REPAIR utility in response to a REPLACE RESET control statement request. The message indicates that the broken page indicator has been reset.

System action

The REPAIR utility has reset the broken page indicator for the specified page. Although the reset indicator has been committed, it has not been logged. If the page is recovered before an image copy is made, the REPAIR RESET must be reapplied.

However, to make the repair persist across subsequent RECOVER operations, an image copy should be taken subsequent to the completion of the REPAIR utility.

Severity

0 (informational)

DSNU658I ***csect-name*** **MULTIPLE RECORDS FOUND WITH SPECIFIED KEY**

Explanation

The specified key is not unique. Several DSNU660I messages, giving possible RID values for this KEY, follow this message.

System action

Processing continues normally.

User response

Change the LOCATE statement to locate the correct RID, and resubmit the request in a new utility job step.

Severity

8 (error)

DSNU659I ***csect-name*** **REPAIR LEVELID OPERATION DISALLOWED.**

Explanation

The REPAIR utility with the LEVELID clause is not allowed. Possible reasons are:

- The data set was in use at the time the REPAIR utility was run.
- The page set has outstanding log apply activity (an indoubt UR has interest in the page set or the page set has pages in the logical page list (LPL)).

System action

Processing ends with this operation.

User response

The REPAIR LEVELID operation for the given index space or table space cannot continue at this stage. If the page set is in use, you should not attempt to run REPAIR LEVELID. If the page set has log apply activity outstanding (indoubt UR or pages in LPL), the log apply activity must complete before using REPAIR LEVELID. Submit other REPAIR control statements in a different job step.

Severity

8 (error)

DSNU660I ***csect-name*** **POSSIBLE RID** ***rid***

Explanation

'rid' is one of several records that map to the specified KEY.

System action

Other records also mapping to the specified KEY are identified by other DSNU660I messages. This message is preceded by message DSNU658I. Processing continues normally.

User response

Change the LOCATE statement to locate the correct RID, and resubmit the request in a new utility job step. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Severity

8 (error)

DSNU661I ***csect-name*** **RECORD NOT FOUND IN PAGE, MAXID=** ***hex-data***

Explanation

A RID was either specified or obtained from the clustering index via the specified KEY. The PAGE indicated in the RID did not contain the RECORD indicated in the RID.

System action

Processing proceeds to the next LOCATE statement, if there is one.

User response

Either change the LOCATE statement to locate a valid RID or KEY, or use LOCATE PAGE and resubmit the REPAIR statements in a new utility job step.

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Severity

8 (error)

DSNU662I ***csect-name*** **NO RECORD FOUND WITH SPECIFIED KEY**

Explanation

A KEY was specified on the LOCATE statement, but no entry exists in the clustering index for that KEY.

System action

Processing begins at the next LOCATE statement, if there is one.

User response

Correct the LOCATE statement, and resubmit the REPAIR statements in a new utility job step.

Severity

8 (error)

DSNU663I ***csect-name*** **PAGE** ***hex-page-number*** **NOT FOUND**

Explanation

The page identified a record identifier (RID) or KEY does not exist in the specified table space.

System action

Processing begins at the next LOCATE statement, if there is one.

User response

Correct the LOCATE statement, and resubmit the REPAIR statements in a new utility job step.

Severity

0 (informational) when issued by DUMP PAGES(n). 8 (error) when issued by LOCATE PAGE(n).

DSNU664I ***csect-name*** **INVALID OFFSET OR LENGTH FOR** ***xxxxx***

Explanation

'xxxxx' is 'RECORD' or 'PAGE'. The specified or default values for OFFSET and LENGTH combine to extend beyond the specified record or page.

System action

Processing continues at the next LOCATE statement, if there is one.

User response

Correct the OFFSET and/or LENGTH specification, and resubmit the REPAIR statements in a new utility job step. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Severity

4 (warning)

DSNU665I *csect-name* NO RECORD ASSOCIATED WITH SPECIFIED RID

Explanation

A record identifier (RID) was specified on the LOCATE statement, but that RID is not associated with any record in the specified table space. If DELETE processing returns this message, the RID may exist but be invalid for DELETE.

System action

Processing begins at the next LOCATE statement, if there is one. Subsequent utilities in the same job step will not be executed.

User response

Correct the LOCATE statement, and resubmit the REPAIR statements in a new utility job step.

Problem determination

REPAIR DELETE will issue this message for RIDs which are internal and do not directly represent user data. The DUMP keyword may be used to view the RID, if it exists. These internal records may only be repaired using the REPLACE keyword.

Severity

8 (error)

DSNU666I *csect-name* NO INDEX EXISTS

Explanation

The KEY for this table space is not a full clustering key. The statement is invalid.

System action

Processing continues at the next LOCATE statement, if there is one.

User response

Correct the LOCATE statement to use the clustering index, or change LOCATE by PAGE or RID.

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Severity

8 (error)

DSNU667I *csect-name additional-information*

Explanation

The REPAIR utility with the CATALOG or VERSIONS option detected a mismatch between the information in the page set and the information in the catalog. The mismatch type is identified by *mismatched-information-type* in message DSNU671I, DSNU674I, or DSNU675I. This message provides additional information about the mismatch.

This problem usually occurs after copying data by using DSN1COPY.

csect-name
The name of the control section that issued the message.

additional-information
Additional information about the mismatch. Possible values are:

REPAIR CANNOT FIX THE ERROR
REPAIR cannot reconcile a difference between the definition of a table or table space in the catalog and the table data or table space data in the page set.

MISSING SYSTEM PAGE IN THE PAGE SET
The page set does not contain a system page. REPAIR does not have enough information about the object from the page set.

A SYSTEM PAGE FOR AT LEAST ONE TABLE IN THE PAGE SET IS MISSING
The page set does not contain a system page for one or more tables in the page set.

TABLE IS DROPPED IN THE PAGE SET
The page set contains a table that was marked as dropped in the database descriptor. REPAIR cannot check table attributes.

NUMBER OF COLUMNS IS *catalog-column-count* IN THE CATALOG, BUT *page-set-column-count* IN THE PAGE SET
The number of columns in a table differs in the catalog and in the page set. If there are *m* columns in the page set, and *n* columns are defined in the catalog, and *m*<*n*, REPAIR reports on *m* columns.

catalog-column-count
The number of columns in the catalog definition of the table.

page-set-column-count
The number of columns in the table data in the page set.

COLUMN *catalog-column-number* DIFFERENCE:
A column definition differs in the catalog and in the page set. This string is followed by one of the following strings:

TYPE IS *catalog-column-data-type* IN THE CATALOG, BUT *page-set-column-data-type* IN THE PAGE SET.
The column data type differs in the catalog and the page set.

catalog-column-data-type
The data type of the column in the catalog definition of the table.

page-set-column-data-type
The data type of the column in the table data in the page set.

LENGTH IS *catalog-column-length* IN THE CATALOG, BUT *page-set-column-length* IN THE PAGE SET.
The column length differs in catalog and the page set.

catalog-column-length
The length of the column in the catalog definition of the table. If the column is nullable, the length is the length of the column, plus one byte for the null indicator.

page-set-column-length
The length of the column in the table data in the page set. If the column is nullable, the length is the length of the column, plus one byte for the null indicator.

PRECISION IS *catalog-column-precision* IN THE CATALOG, BUT *page-set-column-precision* IN THE PAGE SET.
The precision of a decimal column or a TIMESTAMP WITH TIME ZONE column differs in the catalog and in the page set.

catalog-column-precision
The precision of the column in the catalog definition of the table.

page-set-column-precision
The precision of the column in the table data in the page set.

SCALE IS *catalog-column-scale* IN THE CATALOG, BUT *page-set-column-scale* IN THE PAGE SET.
The scale of a decimal column differs in catalog and the page set.

catalog-column-scale
The scale of the column in the catalog definition of the table.

page-set-column-scale
The scale of the column in the table data in the page set.

IS NULLABLE IN THE CATALOG, BUT NOT NULLABLE IN THE PAGE SET.
A column has the NOT NULL attribute in the page set, but does not have the NOT NULL attribute in the catalog.

IS NOT NULLABLE IN THE CATALOG, BUT NULLABLE IN THE PAGE SET.
A column has the NOT NULL attribute in the page set, but does not have the NOT NULL attribute in the catalog.

THE PRECISION AND SCALE COMBINATIONS IN THE CATALOG AND THE PAGE SET ARE INCOMPATIBLE.
A DECIMAL column cannot be altered from the page set format to the catalog format because the number of digits to the left of the decimal point (*precision* minus *scale*) is greater in the page set definition than in the catalog definition. Performing such an operation yields an invalid result, and is not permitted by ALTER SET DATA TYPE.

TABLE DEFINITION ERROR CANNOT BE FIXED
The definition of one or more columns of a table differs in the catalog and in the page set. REPAIR cannot reconcile the differences between the catalog and the page set.

THE MAXIMUM NUMBER OF VERSIONS ALLOWED HAS BEEN EXCEEDED
REPAIR cannot modify the table version number in the page set because doing so would result in a version number greater than 255.

SOME PARTITIONS IN THE PAGE SET WERE COPIED WITH DSN1COPY, AND SOME WERE NOT.
The REPAIR utility detected that at least one of the partition in the page set was copied using DSN1COPY, but at least one other was not.

TABLE SCHEMA CHECKING IS NOT DONE
Schema checking cannot be performed. See the previous DSNU667I message for the cause.

System action

If the mismatch does not impact processing, processing continues, and REPAIR completes with return code 0. Otherwise, message DSNU690I follows, and REPAIR processing ends with return code 4 or return code 8.

User response

If the return code is 8, find the DSN1COPY job that copied the affected data, and ensure that the following conditions are true:

- The target and source table have matching columns.
- The target and source objects have not been dropped.

If you make any changes, rerun DSN1COPY.

Related reference

DSN1COPY (Db2 Utilities)

Syntax and options of the REPAIR control statement (Db2 Utilities)

Related information

DSNU671I
csect-name - DBID=X'*dbid*' PSID=X'*psid*' OBID=X'*obid*' *mismatched-information-type*

DSNU674I
csect-name - *mismatched-information-type* FOR DBID=X'*dbid*' PSID=X'*psid*' IN THE DB2 CATALOG IS *catalog-format-type*, BUT IN THE PAGE SET IS *pageset-format-type*.

DSNU675I
csect-name - *mismatched-information-type* FOR DBID=X'*dbid*' PSID=X'*psid*' IN THE DB2 CATALOG IS *catalog-value*, BUT IN THE PAGE SET IS *pageset-value*.

DSNU690I
csect-name - CAN NOT UPDATE INFORMATION IN THE CATALOG THAT DOES NOT MATCH THE PAGE SET

DSNU695I
csect-name - INFORMATION IN THE CATALOG WAS UPDATED TO MATCH THE PAGE SET

DSNU668I *csect-name* UNABLE TO CONVERT KEY TO *format*

Explanation

The value of *format* specifies the data type to which the KEY specification must be converted. The conversion has failed.

System action

Processing begins at the next LOCATE statement, if there is one.

User response

Correct the LOCATE statement to specify a KEY either of the indicated data type or of a compatible data-type. Then resubmit the REPAIR statements in a new utility job step.

Severity

8 (error)

Related reference

REPAIR (Db2 Utilities)

Syntax and options of the REPAIR control statement (Db2 Utilities)

DSNU669I *csect-name* INDEX NOT FOUND FOR SPECIFIED TABLESPACE

Explanation

An index was specified on the LOCATE KEY statement via the INDEX keyword, but no index by that name was found related to the specified TABLESPACE.

System action

Processing begins at the next LOCATE statement, if there is one.

User response

Correct the LOCATE statement and resubmit the REPAIR statements in a new utility job step.

Problem determination

Valid index names can be found in the SYSIBM.SYSINDEXES catalog table.

Severity

8 (error)

DSNU670I *csect-name* PAGE X *page-id* IS A BROKEN PAGE

Explanation

The indicated page located by the REPAIR utility has been marked broken by the data manager. The 'page id' is given in hexadecimal. This page is not accessible until the broken page indicator is reset by the REPAIR REPLACE RESET option.

System action

The message reports that the page in which the REPAIR utility is requested to REPLACE some data is broken.

System programmer response

Determine the cause of the broken page. It could be an internal error and require IBM Support assistance. The REPAIR DUMP option can be used to determine the contents of the page for failure analysis. If you suspect an error in Db2, you might need to report the

problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

User response

Determine the cause of the broken page with the assistance of the system programmer. When it is repaired, use the REPAIR RESET option.

Severity

4 (warning)

DSNU671I ***csect-name*** **- DBID=X'*dbid*' PSID=X'*psid*' OBID=X'*obid*' *mismatched-information-type***

Explanation

The REPAIR utility with the CATALOG or VERSIONS option detected that information in the catalog table is different from the information in the page set. In this case, no value was available for the page set.

This problem usually occurs after copying data by using DSN1COPY.

csect-name
The name of the control section that issued the message.

dbid
The database identifier (DBID) for the database in which mismatched information was detected.

psid
The page set identifier (PSID) for the table space for which mismatched information was detected.

obid
The object identifier (OBID) for the table for which mismatched information was detected.

mismatched-information-type
The type of information that did not match. *mismatched-information-type* can have one of the following values:

DBID IN THE CATALOG DOES NOT MATCH THE PAGE SET
The database identifier in the catalog does not match the value in the page set..

PSID IN THE CATALOG DOES NOT MATCH THE PAGE SET
The page set identifier in the catalog does not match the value in the page set.

OBID IN THE CATALOG DOES NOT MATCH THE PAGE SET
The object identifier in the catalog does not match the value in the page set.

TABLE SCHEMA IN THE CATALOG DOES NOT MATCH THE PAGE SET
The table schema definition in the catalog does not match the schema definition in the page set.

TABLE ENCODING SCHEME IN THE CATALOG DOES NOT MATCH THE PAGE SET
The encoding scheme (CCSID) definition of the table, column, or both in the catalog does not match the value in the page set.

TABLE VERSION IN THE CATALOG DOES NOT MATCH THE PAGE SET
The table version in the catalog does not match the value in the page set.

TABLE IN THE PAGE SET DOES NOT HAVE A SYSTEM PAGE
The table is missing a system page.

TABLE IS DROPPED IN THE PAGE SET, BUT EXISTS IN THE CATALOG
The table is logically dropped.

TABLE IN THE PAGE SET IS NOT IN THE CATALOG
A table exists in the page set, but not in the catalog.

PART(*part-number*) WAS A TARGET OF DSN1COPY. VERSION PAGE NOT INSERTED.
The table space partition with the number that is specified by *part-number* was previously the target of a DSN1COPY job. A system page cannot be inserted in the partition because the source and target partitions might not have matching schema definitions.

WAS A TARGET OF DSN1COPY. VERSION PAGE NOT INSERTED.
The table space was previously the target of a DSN1COPY job. A system page cannot be inserted in the table space because the source and target partitions might not have matching schema definitions.

PART(*part-number*) NO SPACE AVAILABLE TO INSERT VERSION PAGES
A system page cannot be inserted into the table space partition with the number that is specified by *part-number* because there is not enough space in the partition for the system page.

NO SPACE AVAILABLE TO INSERT VERSION PAGES
A system page cannot be inserted into the table space because there is not enough space in the table space for the system page.

PART(*part-number*) UNABLE TO INSERT VERSION PAGES
A system page cannot be inserted into the table space partition that is specified by *part-number*.

UNABLE TO INSERT VERSION PAGES
A system page cannot be inserted into the table space.

PART(*part-number*) SCHEMA MISMATCH. UNABLE TO INSERT VERSION PAGES.
A system page cannot be inserted into the table space partition that is specified by *part-number* because there is a schema mismatch between the content of the partition and the description in the OBDREC structure for the partition.

SCHEMA MISMATCH. UNABLE TO INSERT VERSION PAGES.
A system page cannot be inserted into the table space because there is a schema mismatch between the content of the table space and the description in the OBDREC structure for the table space.

TABLE VERSION IS NOT IN THE RANGE OF TABLE SPACE VERSIONS
The version number of the table is not in the range of valid version numbers for the table space.

System action

Depending on the type of mismatch, whether the TEST keyword is specified, and whether the table space was the target of DSN1COPY, REPAIR ends with return code 0, 4, or 8. Messages DSNU667I, DSNU690I, or DSNU695I are displayed to provide more information.

System programmer response

1. Examine messages DSNU667I, DSNU690I, or DSNU695I to learn more about the mismatch.
2. Choose between the following alternative approaches:
   - **Alternative 1:**
     a. Find the DSN1COPY job that copied the affected data, and check the following items:
        – Ensure that the SYSXLAT DD statement contains the correct IDs for each object to be translated.
        – Ensure that the correct object name is specified.
        – Ensure that the target and source table have matching columns. See the subsequently issued DSNU667I messages for additional information.
        – Ensure that the target and source objects have not been dropped. See the subsequently issued DSNU667I messages for additional information.
     b. If you made any changes based on the items you checked in the DSN1COPY job, rerun DSN1COPY.
   - **Alternative 2:**
     a. Run REPAIR DBD TEST to determine whether the DBD in the EDM pool is up to date.
     b. If the DBD in the EDM pool is not up to date, with the guidance of IBM Support, run REPAIR DBD REBUILD to rebuild the DBD from the catalog.

Related reference
DSN1COPY (Db2 Utilities)
Syntax and options of the REPAIR control statement (Db2 Utilities)
Related information
DSNU667I
csect-name additional-information

DSNU672I ***csect-name*** **INDEX USED HAS MULTIPLE-FIELD KEY**

Explanation

A REPAIR LOCATE KEY operation was attempted against a table space using an index that has a multiple-field key. LOCATE KEY does not support multiple-field keys.

System action

Processing begins at the next LOCATE scope, if any.

User response

Change the LOCATE statement to specify PAGE and RID, and resubmit the REPAIR statements in a new utility job step.

Severity

8 (error)

DSNU673I ***csect-name*** **REPAIR LOCATE RID LOCATED A NON-DATA PAGE**

Explanation

The LOCATE RID option of the REPAIR utility was used to process a nondata page.

System action

Processing continues at the next LOCATE statement. Otherwise, processing stops.

User response

To process nondata pages, use the LOCATE PAGE option in the REPAIR control statements and resubmit the new utility job step. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Severity

8 (error)

DSNU674I ***csect-name - mismatched-information-type* FOR DBID=X'*dbid*' PSID=X'*psid*' IN THE DB2 CATALOG IS *catalog-format-type*, BUT IN THE PAGE SET IS *pageset-format-type*.**

Explanation

The REPAIR utility with the CATALOG or VERSIONS option detected that information in the catalog table is different from the data from the page set.

This problem usually occurs after copying data by using DSN1COPY.

csect-name
The name of the control section that issued the message.

mismatched-information-type
The type of information that did not match. *mismatched-information-type* can have one of the following values:

- PBG TABLESPACE (for a partition-by-growth table (UTS) spaces)
- PBR TABLESPACE (for a partition-by-range table spaces)
- ROW FORMAT
- RBA FORMAT
- TABLESPACE TYPE

dbid
The database identifier (DBID) for the database in which mismatched information was detected.

psid
The page set identifier (PSID) for the page set for which mismatched information was detected.

catalog-format-type
The value in the catalog for *mismatched-information-type*.

Possible values depend on the value of *mismatched-information-type*, as follows:

Value of *mismatched-information-type*	Possible values of *catalog-format-type*
PBG TABLESPACE	**HASHED** The table space is organized by hash **NOT HASHED** The table space is not organized by hash
PBR TABLESPACE	**HASHED** The table space is organized by hash **NOT HASHED** The table space is not organized by hash
ROW FORMAT	**BRF** Basic row format **RRF** Reorder row format
RBA FORMAT	**BASIC** 6-byte RBA format **EXPANDED** 10-byte RBA format
TABLESPACE TYPE	**PART** Partitioned (non-UTS) table space **PBR** Partition-by-range table space **PBG** Partition-by-growth table space **SEG** Segmented table space (nonUTS) **NON-SEGMENTED** Non-segmented or simple table space. **MC** Universal table space with the MEMBER CLUSTER attribute.

Value of *mismatched-information-type*	Possible values of *catalog-format-type*
	NOT MC Universal table space without the MEMBER CLUSTER attribute **PBG Hash** Partition-by-growth table space that is organized for hash access **PBR Hash** partition-by-range table space that is organized for hash access

pageset-format-type
The value from the page set for *mismatched-information-type*.

Possible values are the same as *catalog-format-type*.

System action

Depending on the type of mismatch, and whether the TEST keyword is specified, REPAIR ends with return code 0, 4, or 8. Messages DSNU690I or DSNU695I are displayed to provide more information.

User response

Examine messages DSNU690I or DSNU695I to learn more about the mismatch.

If the utility completion code is 8, find the DSN1COPY job that might have caused this error. Ensure that the correct object name is specified and that the target and the source have the same table space type. If you made any changes, rerun DSN1COPY.

If the utility completion code is 4, rerun the REPAIR utility without the TEST keyword to fix the catalog.

Related concepts
Table space types and characteristics in Db2 for z/OS (Db2 Administration Guide)
Row format conversion for table spaces (Db2 Administration Guide)
Related reference
DSN1COPY (Db2 Utilities)
Syntax and options of the REPAIR control statement (Db2 Utilities)

DSNU675I ***csect-name - mismatched-information-type* FOR DBID=X'*dbid*' PSID=X'*psid*' IN THE DB2 CATALOG IS *catalog-value*, BUT IN THE PAGE SET IS *pageset-value*.**

Explanation

The REPAIR utility with the CATALOG or VERSIONS option detected that information in the catalog table is different from the data in the page set.

This problem usually occurs after copying data by using DSN1COPY.

csect-name
The name of the control section that issued the message.

mismatched-information-type
The type of information that did not match. *mismatched-information-type* can have one of the following values:

LOW VERSION
The oldest version number for the table space.

HIGH VERSION
The current version number for the table space.

PBG HASHVALUE
The hash value for a partition-by-growth table space.

PBR HASHVALUE
The hash value for a partition-by-range table space.

SEGMENT SIZE
The table space segment size.

PAGE SIZE
The size of the data page.

VERSIONS WRAPPED
The version value in the catalog and page set exceeded 255. The version number was recycled.

CATALOG VERSION WRAPPED
The version value in the catalog exceeded 255. The version number was recycled.

PAGE SET WRAPPED
The version value in the page set exceeded 255. The version number was recycled.

dbid
The database identifier (DBID) for the database in which mismatched information was detected.

psid
The page set identifier (PSID) for the page set for which mismatched information was detected.

catalog-value
The integer value in the catalog for *mismatched-information-type*.

page-set-value
The integer value from the page set for *mismatched-information-type*.

System action

Depending on the type of mismatch, whether the TEST keyword is specified, and whether the page set was copied using DSN1COPY, REPAIR ends with return code 0, 4, or 8. Messages DSNU690I or DSNU695I are displayed to provide more information.

User response

Examine messages DSNU690I or DSNU695I to learn more about the mismatch.

If the utility completion code is 8, find the DSN1COPY job that might have caused this error. Ensure that the correct object name is specified, and that the target and the source have the same segment size and page size. If you make any changes, rerun DSN1COPY.

If the utility completion code is 4, rerun the REPAIR utility without the TEST keyword to fix the catalog.

Related reference
DSN1COPY (Db2 Utilities)
Syntax and options of the REPAIR control statement (Db2 Utilities)

DSNU676I ***csect-name*** **- ROWID=*rowid* VERSION=*version* IS NOT FOUND IN AUXILIARY INDEX**

Explanation

The REPAIR utility was unable to locate the ROWID *rowid* and VERSION *version* in the index on the auxiliary table.

System action

Utility returns completion code=8.

Programmer response

Correct the ROWID or VERSION. Only ROWID and VERSION values previously generated by Db2 can be used. The most likely source values of a ROWID and VERSION are messages DSNU743I, DSNU805I, and DSNU806I from the CHECK DATA or CHECK LOB utilities.

DSNU677I ***csect-name*****-DELETE OPERATION CANNOT DELETE RELATED INDEX ENTRIES OR OTHER ASSOCIATED OBJECTS**

Explanation

A REPAIR utility control statement specified a DELETE operation for a row in a table that has indexes, LOB columns, XML columns, or referential integrity constraints. REPAIR could delete only the table row.

csect-name
The name of the control section that issued the message.

System action

The data record that is specified in the LOCATE block is deleted. However, any related index entries or associated objects are not deleted.

System programmer response

Run the appropriate CHECK utilities to ensure that the data is consistent with the other associated objects and follow the recommended actions.

Severity

4 (warning)

Related reference
Syntax and options of the REPAIR control statement (Db2 Utilities)
CHECK INDEX (Db2 Utilities)
CHECK DATA (Db2 Utilities)
CHECK LOB (Db2 Utilities)

DSNU678I ***csect-name*** **VERIFY, REPLACE, DUMP, OR DELETE BEFORE LOCATE**

Explanation

The REPAIR utility was requested to VERIFY, REPLACE, or DUMP or DELETE a page or record and that page of record could not be located.

System action

Processing begins at the next LOCATE statement, if there is one. Subsequent utilities in the same job step will not be executed.

User response

Correct the REPAIR control statements, and resubmit the request in a new utility job step. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the

problem, see Collecting diagnostic data (Collecting data).

Severity

8 (error)

DSNU679I ***csect-name*** **MULTIPLE 'DELETE'S PER 'LOCATE' NOT ALLOWED**

Explanation

The REPAIR utility was requested to DELETE the same record more than once. Only one DELETE is allowed per LOCATE RID or LOCATE KEY.

System action

Processing begins at the next LOCATE scope, if any. Subsequent utilities in the same job step are not executed.

User response

Remove all but one DELETE control statement from each LOCATE scope which is intended to delete a record. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Severity

8 (error)

DSNU680I ***csect-name*** **PAGE** ***hex-page-number***

Explanation

This message is issued as an identifier at the top of each page dumped by the REPAIR DUMP PAGES facility. 'hex-page-number' identifies the page which is about to be dumped.

System action

Processing continues.

Severity

0 (informational)

DSNU681I ***csect-name*** **SET NOCHECKPEND OPERATION SUCCESSFUL**

Explanation

This message reports the successful completion of the REPAIR SET TABLESPACE NOCHECKPEND utility operation. The check pending restriction has been removed from the specified table space.

System action

The REPAIR SET statement has completed normally.

Severity

0(informational)

DSNU682I ***csect-name*** **SET NORCVRPEND OPERATION SUCCESSFUL**

Explanation

This message reports the successful completion of the REPAIR SET NORCVRPEND utility operation. The RECOVERY PENDING restriction has been removed from the specified table space, from the specified index, or from all indexes of the specified table space.

System action

The REPAIR SET statement has completed normally.

Severity

0 (informational)

DSNU683I ***csect-name*** **REPAIR LEVELID OPERATION SUCCESSFUL.**

Explanation

The REPAIR utility with the LEVELID clause completed successfully.

System action

Processing completed successfully.

User response

Submit any other REPAIR control statements in a different job step.

Severity

0 (informational)

DSNU684I ***csect-name*** **- SET NOAUXCHKP OPERATION SUCCESSFUL**

Explanation

This message reports the successful completion of the REPAIR SET NOAUXCHKP utility operation. The auxiliary check pending (ACHKP) state has been removed for the specified base table space.

System action

Utility returns completion code=0.

DSNU685I ***csect-name*** **SET NORBDPEND OPERATION SUCCESSFUL**

Explanation

This message reports the successful completion of the REPAIR SET NORBDPEND utility operation. The three restrictions REBUILD PENDING, REBUILD PENDING STAR and PAGESET REBUILD PENDING have been removed from the specified index or from all indexes of the specified table space.

System action

The REPAIR SET statement has completed normally.

Severity

0 (informational)

DSNU686I ***csect-name*** **- SET NOAUXWARN OPERATION SUCCESSFUL**

Explanation

This message reports the successful completion of the REPAIR SET NOAUXWARN utility operation. The AUX WARNING state has been removed for the specified table space.

System action

Utility returns completion code=0.

Programmer response

None.

Severity

0 (informational)

DSNU687I ***csect-name*** **- ROWID=*rowid* VERSION=*version* LOB DELETED**

Explanation

The LOB with the ROWID *rowid* and VERSION *version* was successfully deleted from the specified LOB table space.

System action

Utility returns completion code=0.

Programmer response

None

DSNU688I ***csect-name*** **SET NOARBDPEND OPERATION SUCCESSFUL**

Explanation

The REPAIR utility successfully reset an object that was in an advisory rebuild pending (ARBD) state.

System action

No action required.

User response

No response required.

Severity

0 (informational)

DSNU689I ***csect-name*** **SET NOAREORPENDSTART OPERATION SUCCESSFUL**

Explanation

The REPAIR utility successfully reset an object that was in an advisory reorg pending (AREO*) + state.

System action

No action required.

User response

No response required.

Severity

0 (informational)

DSNU690I ***csect-name*** **- CAN NOT UPDATE INFORMATION IN THE CATALOG THAT DOES NOT MATCH THE PAGE SET**

Explanation

The REPAIR utility with the CATALOG or VERSIONS option detected an error in the catalog and page set information and cannot continue processing. The error is described in another DSNU message.

csect-name
The name of the control section that issued the message.

System action

REPAIR cannot continue processing and returns completion code 8.

User response

Correct the problem that is reported in one of the following DSNU messages:

- DSNU671I
- DSNU674I
- DSNU675I

Related reference

Syntax and options of the REPAIR control statement (Db2 Utilities)

Related information

DSNU674I
csect-name - mismatched-information-type FOR DBID=X'*dbid*' PSID=X'*psid*' IN THE DB2 CATALOG IS *catalog-format-type*, BUT IN THE PAGE SET IS *pageset-format-type*.

DSNU675I
csect-name - mismatched-information-type FOR DBID=X'*dbid*' PSID=X'*psid*' IN THE DB2 CATALOG IS *catalog-value*, BUT IN THE PAGE SET IS *pageset-value*.

DSNU691I ***csect-name* - LOB WITH ROWID=*rowid* VERSION=*version* NOT FOUND**

Explanation

The REPAIR utility was unable to find a LOB with the ROWID of *rowid* and VERSION *version*.

System action

Utility returns completion code=8.

Programmer response

Either the ROWID is incorrect, or the index on the auxiliary table is broken. In the first case correct the ROWID as specified on the `LOCATE ROWID` statement. If the index on the auxiliary table is broken, execute the REBUILD INDEX utility to rebuild the index.

DSNU692I ***csect-name* A RECOMMENDED REORG HAS NOT BEEN DONE**

Explanation

One of the following situations occurred:

- The REPAIR utility with the VERSIONS or CATALOG option detected that REORG was not run on the source object after the last alter operation that created a new version. Run REORG before running DSN1COPY on the object.
- REORG was not run on all partitions in the table space. For partitioned objects, run REORG on all partitions before running DSN1COPY on the object.

csect-name
The name of the control section that issued the message.

System action

The utility continues processing. Objects are still usable.

User response

Run REORG on the object to ensure that all data rows are at the current version, and that the object is self-describing.

If you are moving objects from one subsystem to another, follow the steps in Copying tables from one subsystem to another (Db2 Utilities).

Severity

4 (warning)

Related reference

DSN1COPY (Db2 Utilities)
Syntax and options of the REPAIR control statement (Db2 Utilities)
REORG TABLESPACE (Db2 Utilities)
REORG INDEX (Db2 Utilities)

DSNU694I ***csect-name utility-name* CANNOT CONTINUE BECAUSE NOT ENOUGH INFORMATION IS AVAILABLE**

Explanation

The REPAIR utility does not have enough information to update the Db2 catalog for one of the following reasons:

- The utility is unable to find a V0 OBDREC in the system page.
- A system page does not exist.
- The utility is unable to find any information in the page set.

csect-name
The name of the control section that issued the message.

utility-name
The name of the utility. The name can be either REPAIR VERSIONS or REPAIR CATALOG.

System action

The utility terminates. The catalog is not updated.

User response

Perform at least one INSERT or UPDATE operation on one of the partitions, or reorganize the table space. Then use the DSN1COPY utility to copy the physical file from the source and replace the target. If you receive message DSNU694I again, call IBM Support.

Severity

8 (error)

Related reference

DSN1COPY (Db2 Utilities)
REORG TABLESPACE (Db2 Utilities)
Syntax and options of the REPAIR control statement (Db2 Utilities)
INSERT (Db2 SQL)
UPDATE (Db2 SQL)

DSNU695I ***csect-name*** **- INFORMATION IN THE CATALOG WAS UPDATED TO MATCH THE PAGE SET**

Explanation

The REPAIR utility with the CATALOG or VERSIONS option fixed the mismatched information that was identified in one of the following messages:

- DSNU671I
- DSNU674I
- DSNU675I

The utility fixed the mismatched information by changing the value in the catalog table and directory to match the information in the page set.

csect-name
The name of the control section that issued the message.

System action

The utility returns completion code 0.

User response

No action is required.

Related reference

Syntax and options of the REPAIR control statement (Db2 Utilities)

Related information

DSNU671I

csect-name - DBID=X'*dbid*' PSID=X'*psid*' OBID=X'*obid*' *mismatched-information-type*

DSNU674I
csect-name - *mismatched-information-type* FOR DBID=X'*dbid*' PSID=X'*psid*' IN THE DB2 CATALOG IS *catalog-format-type*, BUT IN THE PAGE SET IS *pageset-format-type*.

DSNU675I
csect-name - *mismatched-information-type* FOR DBID=X'*dbid*' PSID=X'*psid*' IN THE DB2 CATALOG IS *catalog-value*, BUT IN THE PAGE SET IS *pageset-value*.

DSNU696I ***csectname*** **- GDGLIMIT COULD NOT BE DETERMINED FOR GDG** ***gdg-name*** **FOR TABLESPACE** ***dbname.tsname*** **RETURN CODE** ***returncode*** **REASON CODE** ***reasoncode***

Explanation

An error was returned from the Catalog Search Interface (IGGCSI00) while trying to determine the GDGLIMIT for the data set shown. Cleanup for the table space shown was not performed.

System action

Utility processing continues.

System programmer response

Correct the problem with the GDG definition and resubmit the utility. If the problem cannot be corrected, this error can be bypassed by using RETAIN LAST(n) syntax and omitting the GDGLIMIT keyword.

Severity

4 (warning)

DSNU697I ***csectname*** **- CLEANUP POINT** ***date*** **HAS BEEN DETERMINED**

Explanation

The MODIFY utility has generated the date shown as the cleanup point. The cleanup point is used to start the deletion of records in SYSCOPY and SYSLGRNX.

System action

Utility processing continues normally.

System programmer response

No response required.

Severity

0 (informational)

DSNU698I ***csect-name*** **- BSDS HAS BEEN USED TO DETERMINE THE CLEANUP POINT**

Explanation

The MODIFY utility has obtained the oldest archive log information from the BSDS data set. Automatic cleanup of SYSCOPY and SYSLGRNX records has been performed based on this information. Records older than the oldest retained archive log record have been deleted.

System action

Utility processing continues normally.

User response

No response required.

Severity

0 (informational)

DSNU699I ***csect-name*** **- GDG LIMIT** ***limit*** **HAS BEEN USED TO DETERMINE CLEANUP POINT**

Explanation

The MODIFY utility has obtained the Generation Data Group (GDG) limit from the GDG base. Automatic cleanup of SYSCOPY and SYSLGRNX records has been performed based on this information. Records that refer to GDG versions which have been reused more recently are deleted.

System action

Utility processing continues normally.

User response

No response required.

Severity

0 (informational)

DSNU700I ***csect-name nnnn*** **INDEX ENTRIES UNLOADED FROM INDEX=*iiii* PARTITION=*pppp***

Explanation

The CHECK utility UNLOAD phase unloaded nnnn records from the index named iiii and partition pppp.

System action

Processing continues.

Severity

0 (informational)

DSNU701I ***csect-name nnnn*** **INDEX ENTRIES UNLOADED FROM *iiii***

Explanation

The REORG utility or the UNLOAD phase of the CHECK utility unloaded *nnnn* records from the index named *iiii*.

System action

Processing continues.

Severity

0 (informational)

DSNU702I ***csect-name*** **INVALID INDEX SPECIFICATION. INDEX=*iiii***

Explanation

All tables referenced by the INDEXES in the CHECK or REBUILD utility must be in the same table space. Index 'iiii' is not over a table in the table space specified with the TABLESPACE keyword.

System action

Utility processing is discontinued.

User response

Correct the index name and/or the TABLESPACE parameters such that a single table space is involved, and rerun the utility job.

Problem determination

To CHECK or REBUILD ALL INDEXES in a table space, use the TABLESPACE keyword, but do not use the list option. This is one way to correct this error. If you want to correct the list of indexes specified in the index name list, the following procedure will locate the table space name related to the index 'iiii'.

The index name 'iiii' reported in the message is of the form 'creator.name'. Obtain the TBCREATOR and TBNAME columns from the Db2 catalog table SYSIBM.SYSINDEXES where columns CREATOR and NAME have the values reported in the message. Obtain the DBNAME and TSNAME columns from the Db2 catalog table SYSIBM.SYSTABLES, where columns

CREATOR and NAME have the values obtained from TBCREATOR and TBNAME of SYSIBM.SYSINDEXES.

The values for DBNAME and TSNAME must be the same for all indexes specified in the index name list and must be the same as the table space name specified on the TABLESPACE keyword (if provided).

Severity

8 (error)

DSNU703I ***csect-name*** **INVALID INDEX SPECIFICATION. INDEX=*iiii***

Explanation

All tables referenced by the indexes in the CHECK or REBUILD utility must be in the same table space. Index 'iiii' is not over a table in the same table space as the prior indexes listed in the index name list.

System action

Utility processing is discontinued.

User response

Correct the index name and/or the TABLESPACE parameters such that a single table space is involved, and rerun the utility job.

Problem determination

To CHECK or REBUILD ALL INDEXES in a table space, use the TABLESPACE keyword, but do not use the list option. This is one way to correct this error. If you want to correct the list of indexes specified in the index name list, the following procedure will locate the table space name related to the index 'iiii'.

The index name 'iiii' reported in the message is of the form 'creator.name'. Obtain the TBCREATOR and TBNAME columns from the Db2 catalog table SYSIBM.SYSINDEXES, where columns CREATOR and NAME have the values reported in the message. Obtain the DBNAME and TSNAME columns from the Db2 catalog table SYSIBM.SYSTABLES, where columns CREATOR and NAME have the values obtained from TBCREATOR and TBNAME of SYSIBM.SYSINDEXES.

The values for DBNAME and TSNAME must be the same for all indexes specified in the index name list and must be the same as the table space name specified on the TABLESPACE keyword if provided.

Severity

8 (error)

DSNU704I ***csect-name*** **INVALID INDEX NON-LEAF PAGE. INDEX=*iiii*, KEY=*kkkk***

Explanation

The CHECK INDEX utility found an invalid non-leaf page while traversing the specified index to find the specified key.

csect-name
The name of the control section that issued the message.

iiii
The index name.

kkkk
The hexadecimal representation of the key value.

System action

CHECK INDEX utility processing continues. The utility completes with return code 4.

User response

Run the REBUILD INDEX utility for index *iiii*.

Severity

4 (warning)

Related reference
CHECK INDEX (Db2 Utilities)
REBUILD INDEX (Db2 Utilities)

DSNU705I ***csect-name*** **UNLOAD PHASE COMPLETE, ELAPSED TIME=*tttt***

Explanation

The unload phase of the CHECK or REBUILD INDEX utility is complete.

System action

Processing continues.

Severity

0 (informational)

DSNU706I ***csect-name*** **ROW IS IN WRONG PARTITION RID=*rrrr*, INDEX=*iiii*, KEY=*kkkk*, CORRECT PART=*pppp*, WRONG PART=*wwww***

Explanation

The row at RID 'rrrr' resides in the wrong partition. The partitioning KEY 'kkkk' for partitioning INDEX 'iiii' indicates that the row at RID 'rrrr' should reside in

partition 'pppp', however the rid indicates that the row contains partition 'wwww'.

System action

Utility processing continues.

User response

Run RECOVER TABLESPACE utility to recover the data or run REPAIR DELETE utility to delete the row 'rrrr' followed by CHECK INDEX and CHECK DATA utility if referential constraints are involved.

Problem determination

The inconsistency between the table space partition number of a row and the index space partition number of the row's clustering key may be due to a Db2 internal error, but is most likely due to a user using the DSN1COPY service aid to populate a target table space with data from a source table space when the clustering key values on the source and target table spaces are not identical.

Severity

4 (warning)

DSNU707I ***csect-name*** **INDEX ENTRY POINTS TO WRONG TABLE. OBID=*oooo*, RID=*rrrr*, INDEX=*iiii*, KEY=*kkkk***

Explanation

The CHECK INDEX utility found that an index contains an entry for a key that points to a record at the specified RID. However, the record belongs to the table with the specified OBID.

csect-name
The name of the control section that issued the message.

oooo
The object identifier (OBID).

rrrr
The record ID (RID) in hexadecimal format.

iiii
The index name.

kkkk
The hexadecimal representation of the key value.

System action

CHECK INDEX utility processing continues.

User response

Run the REBUILD INDEX utility for index *iiii*.

Severity

4 (warning)

Related reference
CHECK INDEX (Db2 Utilities)
REBUILD INDEX (Db2 Utilities)

DSNU708I ***csect-name*** **INDEX IS NOT UNIQUE. INDEX=*iiii*, KEY=*kkkk***

Explanation

The CHECK INDEX utility found that a unique index contains a non-unique key.

csect-name
The name of the control section that issued the message.

iiii
The index name.

kkkk
The hexadecimal representation of the key value.

System action

CHECK INDEX utility processing continues.

User response

Drop the unique index and delete the duplicate rows. Re-create the index.

Severity

4 (warning)

Related reference
CHECK INDEX (Db2 Utilities)

DSNU709I ***csect-name*** **NO INDEX ENTRY FOR ROW. RID=*rrrr*, INDEX=*iiii*, KEY=*kkkk***

Explanation

The CHECK INDEX utility found that an index is missing an entry for the row at the specified RID with the specified key.

csect-name
The name of the control section that issued the message.

rrrr
The record ID (RID) in hexadecimal format.

iiii
The index name.

kkkk
The hexadecimal representation of the key value.

System action

CHECK INDEX utility processing continues. The utility completes with return code 4.

User response

Run the REBUILD INDEX utility for index *iiii*.

Severity

4 (warning)

Related reference

CHECK INDEX (Db2 Utilities)

REBUILD INDEX (Db2 Utilities)

DSNU710I ***csect-name*** **INDEX ENTRY CONTAINS INVALID ZERO REPRESENTATION. RID=*rrrr*, INDEX=*iiii*, KEY=*kkkk***

Explanation

The CHECK INDEX utility found an index that has an entry that contains a negative zero. The index entry is for the row at the specified RID with the specified key.

csect-name
The name of the control section that issued the message.

rrrr
The record ID (RID) in hexadecimal format.

iiii
The index name.

kkkk
The hexadecimal representation of the key value.

System action

CHECK INDEX utility processing continues.

User response

Run the REBUILD INDEX utility for index *iiii*.

Severity

4 (warning)

Related reference

CHECK INDEX (Db2 Utilities)

REBUILD INDEX (Db2 Utilities)

DSNU711I ***csect-name*** **NO ROW FOR INDEX ENTRY. RID=*rrrr*, INDEX=*iiii*, KEY=*kkkk***

Explanation

The CHECK INDEX utility found an index that contains an entry that has no row. The index entry contained the specified RID and key, but the RID is not a valid record.

csect-name
The name of the control section that issued the message.

rrrr
The record ID (RID) in hexadecimal format.

iiii
The index name.

kkkk
The hexadecimal representation of the key value.

System action

CHECK INDEX utility processing continues.

User response

Run the REBUILD INDEX utility for index *iiii*.

Severity

4 (warning)

Related reference

CHECK INDEX (Db2 Utilities)

REBUILD INDEX (Db2 Utilities)

DSNU712I ***csect-name*** **INDEX OUT OF SEQUENCE. INDEX=*iiii*, KEY=*kkkk***

Explanation

The CHECK INDEX utility found that an index is not in the correct sequence.

csect-name
The name of the control section that issued the message.

iiii
The index name.

kkkk
The hexadecimal representation of the key value.

System action

CHECK INDEX utility processing continues.

User response

Run the REBUILD INDEX utility for index *iiii*.

Severity

4 (warning)

Related reference

CHECK INDEX (Db2 Utilities)

REBUILD INDEX (Db2 Utilities)

DSNU713I ***csect-name*** **KEYS MISMATCH. RID=*rrrr*, INDEX=*iiii*, KEY=*kkkk*, DATA KEY=*jjjj***

Explanation

The CHECK INDEX utility found an index that contains an entry for the row at the specified rid that is inconsistent. The specified key does not match the specified data key.

csect-name
The name of the control section that issued the message.

rrrr
The record ID (RID) in hexadecimal format.

iiii
The index name.

kkkk
The hexadecimal representation of the key value.

jjjj
The data key.

System action

CHECK INDEX utility processing continues.

User response

Run the REBUILD INDEX utility for index *iiii*.

Severity

4 (warning)

Related reference

CHECK INDEX (Db2 Utilities)

REBUILD INDEX (Db2 Utilities)

DSNU714I ***csect-name*** **CHECK DATA CANNOT GENERATE A REPAIR STATEMENT FOR A COMPRESSED ROW OF TABLE *table-name***

Explanation

The CHECK DATA utility detected an inconsistency on a compressed row in the specified table. Although the SHRLEVEL CHANGE option and one of the following options was specified, a REPAIR statement cannot be generated for a compressed row:

- AUXERROR INVALIDATE
- LOBERROR INVALIDATE
- XMLERROR INVALIDATE

csect-name
The name of the control section that issued the message.

table-name
The name of the table in which the inconsistency was detected.

System action

CHECK DATA continues processing.

System programmer response

See a previous message to determine the inconsistency.

Consider modifying the CHECK DATA utility control statement to use SHRLEVEL REFERENCE or the REPORT option of AUXERROR, LOBERROR, or XMLERROR.

Severity

4 (warning)

Related reference

Syntax and options of the CHECK DATA control statement (Db2 Utilities)

DSNU715I ***csect-name*** **MULTIPLE INDEX ENTRIES FOR ROW. RID=*rrrr*, INDEX=*iiii*, KEY=*kkkk***

Explanation

The CHECK INDEX utility found an index that has multiple index entries for the row at the specified RID with the specified key.

csect-name
The name of the control section that issued the message.

rrrr
The record ID (RID) in hexadecimal format.

iiii
The index name.

kkkk
The hexadecimal representation of the key value.

System action

CHECK INDEX utility processing continues.

User response

Run the REBUILD INDEX utility for index *iiii*.

Severity

4 (warning)

Related reference

CHECK INDEX (Db2 Utilities)

REBUILD INDEX (Db2 Utilities)

DSNU717I ***csect-name nnnn*** **ENTRIES CHECKED FOR INDEX=*iiii* PARTITION=*pppp***

Explanation

The CHECK utility completed checking index iiii partition pppp and processed nnnn index entries. This message is issued once for each index partition checked.

System action

Processing continues.

Severity

0 (informational)

DSNU718I ***csect-name*** **NO INDEXES FOUND FOR TABLESPACE *tttt***

Explanation

A utility has been invoked with the TABLESPACE keyword specifying a table space containing tables that have no indexes.

System action

This message indicates completion of the utility. Processing continues to the next utility statement in the job step, if any. If there are no utility statements following, the job step is terminated normally and the UTILID of the job step becomes available for reuse.

User response

If the table space specification is in error, correct it and resubmit the utility. If the table space specification is correct, and the table space contains no indexed tables, this is a normal indication and no response is necessary.

Severity

4 (warning)

DSNU719I ***csect-name nnnn*** **ENTRIES CHECKED FOR INDEX *iiii***

Explanation

The CHECK utility has completed checking index 'iiii' and has processed 'nnnn' index entries. This message will be issued once for each index checked.

System action

Processing continues.

Severity

0 (informational)

DSNU720I ***csect-name*** **SORTCHK PHASE COMPLETE, ELAPSED TIME = *tttt***

Explanation

The CHECK utility SORTCHK phase is complete.

System action

Processing continues.

Severity

0 (informational)

DSNU721I ***csect-name*** **- USER *auth-id* DOES NOT HAVE DELETE AUTHORITY ON TABLE**

Explanation

The CHECK DATA utility was run with DELETE YES, but user *auth-id* does not have authority to delete from a table specified in the utility statement or from one of its descendents.

System action

Further utility processing is terminated.

User response

Obtain authorization to delete from the tables specified in the utility statement and any of its descendents that are affected.

Severity

8 (error)

DSNU722I ***csect-name*** **- USER *userid* DOES NOT HAVE INSERT AUTHORITY ON EXCEPTION TABLE**

Explanation

The CHECK DATA utility was run with FOR EXCEPTION specified but user 'userid' does not have authority to insert into an exception table specified in the utility statement.

System action

Further utility processing is terminated.

User response

Obtain authorization to insert into all of the exception tables specified in the utility statement.

Severity

8 (error)

DSNU725I ***csect-name*** **DUPLICATE TABLESPACE** ***tsp*** **NAMES EXIST IN THE TABLESPACE LIST**

Explanation

This message is issued by the CHECK DATA utility when a duplicate table space 'tsp' is found in the table space list. An entry in the list for the same table space with a partition specified is also considered a duplicate. This is because all partitions are the default when no partition is specified for a partitioned table space. The CHECK DATA utility proceeds and the duplicate entry is skipped.

System action

Processing continues.

Severity

4 (warning)

DSNU726I ***csect-name*** **SCOPE PENDING IS ACTIVE, BUT THE ENTIRE TABLE SPACE** ***tsp*** **MUST BE CHECKED**

Explanation

This message is issued by the CHECK DATA utility when checking with the option SCOPE PENDING. Table space *tsp* is in check pending status, but the utility is checking all rows in dependent tables or tables defined with check constraints in that table space.

System action

The utility continues processing.

Severity

4 (warning)

DSNU727I ***csect-name*** **TABLESPACE** ***tsp*** **IS NOT CHECK PENDING**

Explanation

This message is issued when 'CHECK DATA TABLESPACE tsp SCOPE PENDING' is specified and the CHECK DATA utility finds that the table space is not in a check pending state. The CHECK DATA utility skips table space 'tsp' and will continue with any other table space specified. The catalog fields that reflect the extent of a check pending state are updated to ensure that they indicate that no check is required.

System action

Processing continues.

Severity

4 (warning)

DSNU728I ***csect-name*** **INVALID EXCEPTION TABLE** ***exception-table*** **FOR THE** ***dependent-table*****.**

Explanation

The CHECK DATA utility encountered one of the following errors:

- Row or column access control is enforced for the dependent table, but it is not enforced for the exception table.
- The length of the RID column of the exception table does not match the RID size of the table space for the table that is being checked.
- The number of columns or the column definitions for the exception table do not match the column descriptions for the dependent table.

System action

The CHECK DATA utility terminates processing after all the exception tables have been examined.

User response

If row or column access control is enforced for the dependent table, ensure that it enforced for the exception table.

If the length of the RID column of the exception table does not match the RID size of the table space, alter the length of the RID column. CHAR(5) is required for LARGE or DSSIZE table spaces.

If the number of columns or the column definitions for the exception table and the dependent table do not match, modify the exception table definition to match the dependent table definition.

Severity

8 (error)

Related reference

ALTER TABLE (Db2 SQL)

Related information

Managing access through row permissions and column masks (Managing Security)

DSNU729I ***csect-name*** **TABLE** ***table-name*** **NOT SPECIFIED IN THE 'FOR EXCEPTION' CLAUSE**

Explanation

The CHECK DATA utility did not find a required table listed in the FOR EXCEPTION clause. All tables with constraints in the table spaces being checked and their descendents must be listed in the FOR EXCEPTION clause of CHECK DATA utility.

System action

The CHECK DATA utility terminates processing after all the required tables are examined.

User response

Examine the utility input statement to determine the reason for the missing table named in the message. Correct the input statement to include the missing table and resubmit the job.

Severity

8 (error)

Related reference

CHECK DATA (Db2 Utilities)

Syntax and options of the CHECK DATA control statement (Db2 Utilities)

DSNU730I ***csect-name*** **CHECKING TABLE** ***table-name***

Explanation

The CHECK DATA utility is beginning to process a table.

csect-name
The name of the control section that issued the message.

table-name
The name of table that is being checked.

System action

Processing continues.

Severity

0 (informational)

Related reference

CHECK DATA (Db2 Utilities)

DSNU731I ***csect-name*** **EXCEPTION LIMIT REACHED**

Explanation

The EXCEPTION limit specified on the CHECK utility statement has been reached.

System action

The CHECK utility terminates processing.

User response

If required, increase the exception limit and resubmit the job.

Severity

8 (error)

DSNU732I **NO TABLE TO BE CHECKED FOR TABLESPACE** ***tsp***

Explanation

The CHECK DATA utility determined that none of the tables in table space *tsp* has a constraint defined. Therefore, no table in that table space is checked.

System action

Utility processing continues.

Severity

4 (warning)

DSNU733I ***csect-name*** **ROW (RID=***row-identifier***) HAS NO PARENT FOR** ***relationship-identifier***

Explanation

Th CHECK DATA utility found a row in a dependent table without a parent. The row with the *row-identifier* RID value has no parent for the relationship named by

the *relationship-identifier* value. This message is always proceeded by a DSNU730I message that identifies the table in error.

System action

Processing continues.

User response

Resolve the check pending status.

Severity

4 (warning)

Related tasks

Adding referential constraints to existing tables (Db2 Administration Guide)

Collecting data for failures after a point-in-time recovery (Collecting data)

Related reference

CHECK-pending status (Db2 Utilities)

CHECK DATA (Db2 Utilities)

Related information

DSNU730I
csect-name CHECKING TABLE *table-name*

Recovering from referential constraint violation (Db2 Administration Guide)

DSNU735I ***csect-name*** **DUPLICATE TABLESPACE** ***tsp*** **PARTITION** ***part*** **NAMES EXIST IN THE TABLESPACE LIST**

Explanation

This message is issued by the CHECK DATA utility when a duplicate table space 'tsp' and partition 'part' is found in the table space list. An entry in the table space list with a partition specified is considered to be a duplicate when another entry for the same table space with no partition specified (defaults to all partitions for a partitioned table space) is found. In this case, the table space list entry with no partition specified has priority and the entry with a partition specified is skipped. The CHECK DATA utility proceeds and the duplicate entry is skipped.

System action

Processing continues.

Severity

4 (warning)

DSNU736I ***csect-name*** **SCOPE PENDING IS ACTIVE, BUT THE ENTIRE TABLE SPACE** ***tsp*** **PARTITION** ***part*** **MUST BE CHECKED**

Explanation

This message is issued by the CHECK DATA utility when checking with the option SCOPE PENDING. Table space *tsp* partition *part* is in check pending status, but the utility is checking all rows in that table space partition.

System action

The utility continues processing.

Severity

4 (warning)

DSNU737I ***csect-name*** **TABLESPACE** ***tsp*** **PARTITION** ***part*** **IS NOT CHECK PENDING**

Explanation

This message is issued when 'CHECK DATA TABLESPACE tsp PART part SCOPE PENDING' is specified and the CHECK DATA utility finds that the table space partition is not in a check pending state. The CHECK DATA utility skips table space 'tsp' partition 'part' and continues with any other table space specified. The catalog fields that reflect the extent of a check pending state are updated to ensure that they indicate that no check is required.

System action

Processing continues.

Severity

4 (warning)

DSNU739I ***csect-name*** **CHECK TABLE** ***tab*** **COMPLETE,** ***elapsed time=t1***

Explanation

This message is issued when the CHECK DATA utility finishes processing a table. The elapsed clock time that the check of table 'tab' consumed is 't1'.

Severity

0 (informational)

DSNU740I ***csect-name*** **CHECKING TABLE** ***tab*** **PARTITION** ***part***

Explanation

This message is issued when the CHECK DATA utility begins to process a table of a partitioned table space in which a single partition was specified. The name of the table and the number of the partition being checked are identified in the message.

System action

Processing continues.

Severity

0 (informational)

DSNU741I ***csect-name nn* ROWS DELETED FROM TABLE *tab***

Explanation

This message is issued by the CHECK DATA utility when the DELETE YES option is specified. The number of rows deleted from TABLE *tab* is the number of rows that contain referential integrity violations or check constraint violations, plus their descendent rows. The number of rows deleted from TABLE *tab* is equal to the number of rows inserted into the corresponding exception table.

System action

Processing continues.

Severity

4 (warning)

DSNU742I ***csect-name* ROW (RID=*row-identifier*) VIOLATES CHECK CONSTRAINT *constraint-name* ON TABLE *table-name***

Explanation

The CHECK DATA utility found that the row with RID=*row-identifier* in table *table-name* violated check constraint *constraint-name*.

System action

Processing continues

User response

Resolve the check pending status.

Severity

4 (warning)

Related tasks

Collecting data for failures after a point-in-time recovery (Collecting data)

Adding referential constraints to existing tables (Db2 Administration Guide)

Related reference

Advisory or restrictive states (Db2 Utilities)

CHECK-pending status (Db2 Utilities)

CHECK DATA (Db2 Utilities)

Related information

Recovering from referential constraint violation (Db2 Administration Guide)

DSNU743I ***csect-name* - LOB IS INVALID. ROWID=*rowid* VERSION=*version***

Explanation

The CHECK LOB utility found that the LOB with ROWID *rowid* and VERSION *version* is marked invalid.

System action

If SHRLEVEL REFERENCE was specified or defaulted, then the LOB table space status is set to auxiliary warning (AUXW). If SHRLEVEL CHANGE was specified, then the table space status remains unchanged.

User response

You must use SQL to update the LOB column or delete the row that contains the LOB column to remove the invalid indication. REPAIR LOCATE ROWID VERSION DELETE can be used to remove the entire LOB from the LOB table space.

Severity

4

DSNU745I ***csect-name* - ROWID=*rowid* VERSION=*version* RID=*rid* MISSING IN LOB TABLE SPACE=*lob-table-space-name***

Explanation

The CHECK INDEX utility found an index entry key with ROWID *rowid* and VERSION *version* in the index, but not in the LOB table space named *lob-table-space-name*.

System action

The utility returns completion code=4. The index is set Recover Pending.

Programmer response

Use REBUILD INDEX or RECOVER to correct the index on the auxiliary table.

DSNU747I ***csect-name*** **- ROWID=*rowid* VERSION=*version* MISSING IN INDEX=*index-name***

Explanation

The CHECK INDEX utility found a LOB with ROWID *rowid* and VERSION *version* in the LOB table space but not in the index on the auxiliary table, *index-name*.

System action

Utility returns completion code=4. The index is set Recover Pending.

Programmer response

Use REBUILD INDEX to correct the index on the auxiliary table.

DSNU749I ***csect-name*** **CHECK DATA COMPLETE, ELAPSED TIME=*t1***

Explanation

This message is issued when the CHECK DATA utility is complete. The elapsed clock time that the CHECK DATA utility consumed is 't1'.

System action

Processing ends.

Severity

0 (informational)

DSNU750I ***csect-name utility-name operation*** **PHASE *phase-number* STARTED**

Explanation

The utility phase processing started for the indicated operation.

csect-name
The name of the control section that issued the message.

utility-name
The CATMAINT or CATENFM utility.

operation
The operation that started

phase-number
The phase number of the operation

System action

Utility processing continues normally.

Severity

0 (informational)

Related reference
CATMAINT (Db2 Utilities)
CATENFM (Db2 Utilities)

DSNU751I ***csect-name*** **CATALOG *operation* OF TABLE - *table-name***

Explanation

This message is issued the first time data is operated upon for the designated table.

System action

Utility processing continues normally.

Severity

0 (informational)

DSNU752I ***csect-name utility-name operation*** **PHASE *phase-number* COMPLETED**

Explanation

Utility processing completed for the indicated operation.

csect-name
The name of the control section that issued the message.

utility-name
The CATMAINT or CATENFM utility.

operation
The operation that completed.

phase-number
The phase number of the operation.

System action

Utility processing continues normally.

Severity

0 (informational)

Related reference
CATMAINT (Db2 Utilities)
CATENFM (Db2 Utilities)

DSNU756I ***csect-name*** **CATALOG TABLE IS EMPTY - *table-name***

Explanation

This message is issued when the named table is empty.

System action

Utility processing continues normally.

Severity

0 (informational)

DSNU758I ***csect-name*** **- WARNING DURING PROCESSING SQL STATEMENT - SQLCODE IS:** ***sql-code*** **SQL MESSAGE TEXT:** ***message-text*****. SQL STATEMENT:** ***sql-statement*** **SQLERRP:** ***error-procedure*** **SQLERRD:** ***sqlerrd-fields***

Explanation

CATMAINT executed an SQL statement as part of CATMAINT UPDATE processing. Db2 returned a non-zero SQLCODE. This message does not indicate a problem in the CATMAINT process.

csect-name
The name of the control section that issued the message.

sql-code
The SQL code that was returned for the SQL statement.

sql-code
A numeric value that indicates why the SQL statement executed abnormally.

message-text
Indicates the problem with the SQL statement.

sql-statement
The SQL statement that encountered the error.

error-procedure
The name of the procedure that detected the error. This value corresponds to the SQLERRP SQCLCA field.

sqlerrd-fields
A series of fields that contain a values that indicate the number of rows that qualified for the SQL statement, the number of rows in the result table, a rough estimate of required resources, or an internal error code. These values correspond to the SQLERRD(*n*) SQLCA fields.

System action

Utility processing continues normally.

User response

No action is required.

Severity

0 (informational)

Related reference
Description of SQLCA fields (Db2 SQL)

DSNU759I ***csect-name*** **INCORRECT UNLOAD DATASET HAS BEEN DETECTED**

Explanation

This message indicates an inconsistency between the release level of the unloaded catalog and the Db2 release that is running the CATMAINT utility.

System action

Utility processing terminates.

User response

Review the JCL for the job to ensure that the correct unload data set is specified. Verify that the correct level of Db2 is up.

Severity

8 (error)

DSNU760I ***csect-name*** **SPECIFIED USER NOT DEFINED WITH INSTALLATION SYSADM AUTHORITY**

Explanation

The utility can be run only under a user defined with the installation SYSADM authority.

System action

Utility processing terminates.

User response

Rerun the utility with the proper authorization.

Severity

8 (error)

DSNU762I ***csect-name*** **DUPLICATE RECORD DETECTED FOR TABLENAME -** ***table-name*** **SEQNO OF THE INPUT RECORD IS -** ***seqno*** **FOLLOWING IS UP TO 119 BYTES OFRECORD BEING INSERTED**

Explanation

An object created in the target catalog has the same name as an object being migrated from the source catalog.

System action

Utility abends.

User response

User data should not be in the target catalog before running the CATMAINT utility. Free or drop the object from the target catalog and rerun the CATMAINT utility.

Severity

8 (error)

DSNU764I **csect-name FOLLOWING IS UP TO 119 BYTES OF RECORDFOR TABLE table-name, SEQNO seqno BEING PROCESSED AT THE TIME OF ERROR**

Explanation

An abend occurred during the execution of the CATMAINT utility, during the processing of the table, 'table-name', with a sequence number of 'seqno'. The cause of the abend is one of the following:

- The record sequence number was invalid.
- An unexpected return code was received from DSNUEXLO.
- The table name was not found in the load table (DSNUELTB).
- The parent record could not be positioned.
- The position OBID was zero (DSNUELTB has incorrect value).
- The record action code is incorrect.

Following this message, up to the first 119 bytes of the recordin question is displayed.

System action

Utility abends.

User response

Verify that the record in the unloaded data set is correct.

Severity

8 (error)

DSNU765I ***csect-name*** **THE DB2 CATALOG IS NOT AT THE REQUIRED LEVEL. CATALOG NOT UPDATED**

Explanation

The Db2 catalog is not at the proper catalog level to migrate the catalog. This error can occur due to the following reasons:

- Attempting to migrate the catalog from a Db2 release that does not support migration
- Attempting to migrate Db2 Stored Procedures prior to a catalog migration

System action

Utility processing terminates

User response

Fall back to the previous release if the catalog is not at the correct level for a migration. Migrate only from Db2 releases that support migration.

Severity

8 (error)

DSNU766I ***csect-name*** **THE CATALOG HAS ALREADY BEEN MIGRATED. NO ACTION WILL BE TAKEN**

Explanation

The catalog was already successfully migrated. There is no reason to rerun the catalog migration job. Therefore, no action is taken to update the Db2 catalog.

csect-name
The name of the control section that issued the message.

System action

Processing ends.

Severity

4 (warning)

Related reference

CATMAINT (Db2 Utilities)

DSNU767I ***csect-name*** **- INVALID *object-name* IS SPECIFIED, REASON *reason-code***

Explanation

The CATMAINT utility encountered an invalid object name during update processing.

csect-name
The name of the control section that issued the message.

object-name
The invalid name, which corresponds to the specific CATMAINT UPDATE option.

CATMAINT UPDATE OWNER
The name identifies an object owner.

CATMAINT UPDATE SCHEMA
The name identifies an owner, creator, or schema.

CATMAINT UPDATE VCAT
The name identifies an integrated catalog facility catalog.

reason-code
The reason for the message or SQL code, indicated by one of the following values:

1
The name cannot be longer than 8 bytes in EBCDIC representation.

2
The name cannot be specified more than once.

3
The name cannot be the qualifier of an existing object.

4
The name "SYSIBM" is not allowed.

5
The name cannot be the qualifier of an existing object of the following types:

- Views
- SQL functions
- Materialized query tables
- Triggers
- A native SQL procedures
- Expression-based indexes
- Column masks
- Row permissions

6
The OWNER and SCHEMA clauses are mutually exclusive, and cannot be specified in the same CATMAINT UPDATE statement.

7
The OWNER option is specified, but no role is present. The user must run under a trusted context.

8
A name cannot be referenced in check conditions.

9
The name is too long to fit in PATHSCHEMA. PATHSCHEMA cannot exceed 2048 bytes.

System action

The utility terminates with return code 8.

User response

Remove or modify the invalid name, and then rerun the utility.

Severity

8 (error)

Related reference
CATMAINT (Db2 Utilities)

DSNU768I ***csect-name*** **CATMAINT CONVERT COMPLETE FOR INDEX** ***index-name***

Explanation

The conversion is complete for index *index-name*.

System action

Processing continues with the next index.

Severity

0 (informational)

DSNU769I ***csect-name*** **THE BUILD PHASE FAILED FOR INDEX** ***index-name*** **REASON** ***reason***

Explanation

The CATMAINT CONVERT build phase failed for index *index-name*. This message and others identify the actions that should be taken.

System action

Utility processing continues with the next index and will terminate with return code 8.

Operator response

Note the reason code and the index name. See the Problem Determination section for an explanation of the collected data.

User response

Correct the problem indicated by the reason code. Either resubmit the CATMAINT CONVERT job or recover the index that failed.

Severity

8 (error)

Related concepts

Db2 reason codes (Db2 Codes)

Related reference

CATMAINT (Db2 Utilities)

DSNU770I ***csect-name*** **- DBD** ***type*** **STARTED FOR DATABASE** ***database***

Explanation

This message marks the start of the REPAIR DBD type utility. In the message, 'type' can be DIAGNOSE, REBUILD, or TEST. The database name specified in the REPAIR statement is 'database'.

System action

Utility processing continues normally.

Severity

0 (informational)

DSNU771I ***csect-name*** **- DBD** ***type*** **COMPLETE FOR DATABASE** ***database***

Explanation

This message marks the completion of the REPAIR DBD type utility. In the message, 'type' can be DIAGNOSE, REBUILD, or TEST. The database name specified in the REPAIR statement is 'database'.

System action

Utility processing continues normally.

Severity

0 (informational)

DSNU772I ***csect-name*** **- THE** ***object-type qualifier.object-name*** **IS UNAVAILABLE IN THIS RELEASE**

Explanation

This message indicates that the specified object has a dependency on a release from which fall back has occurred, and cannot be operated upon in the current release.

System action

Utility processing terminates.

User response

Check the IBMREQD column of the catalog table associated with the specified object type. If the value in the catalog table is the release dependency mark for a release of Db2 from which fall back has occurred, the utility is not operational for the current release of the targeted database.

Severity

8 (error)

DSNU773I ***csect-name*** **-** ***database*** **IS A SYSTEM DATABASE AND CANNOT BE PROCESSED**

Explanation

The database indicated is not eligible for processing by the type of the REPAIR DBD utility involved.

System action

Utility processing terminates.

User response

Ensure that the utility control statement specifies the correct database.

Severity

8 (error)

DSNU774I ***csect-name*** **- SPECIFIED DATABASE** ***database*** **NOT FOUND**

Explanation

The database indicated by the utility control statement was not found in catalog table SYSIBM.SYSDATABASE.

System action

Utility processing terminates.

User response

Ensure that the database indicated by the utility control statement exists in SYSIBM.SYSDATABASE.

Severity

8 (error)

DSNU775I *csect-name* - DROP OF DATABASE *dbname* FAILED WITH SQLCODE = *sql-code*

Explanation

An error was encountered while using the REPAIR DBD DROP utility to drop DATABASE *dbname*. The SQL error code is indicated by *sql-code*.

System action

DATABASE *dbname* is not dropped.

User response

Take the action that is specified for the SQL code that is indicated *sql-code* value.

Severity

8 (error)

Related concepts

SQL codes (Db2 Codes)

Related tasks

Repairing DBDs (Db2 Utilities)

Related reference

REPAIR (Db2 Utilities)

DSNU776I *csect-name* CATMAINT *operation* ERROR - *error-text*

Explanation

The CATMAINT utility halted because of an error condition.

csect-name
The name of the control section that issued the message.

operation
The CATMAINT utility operation that failed.

error-text
A description of the error condition.

System action

Utility processing halts.

User response

Use the *error-text* description to determine the error condition, resolve the error condition, and run the CATMAINT utility again.

Severity

0 (informational)

Related tasks

Updating the catalog for installation or migration to Db2 12 (Db2 Utilities)

Related information

00E40601 (Db2 Codes)

DSNU777I
csect-name CATMAINT *operation* STATUS *status-msg*

DSNU778I
csect-name - ERROR PROCESSING SQL STATEMENT - SQL CODE IS: *sql-code* SQL MESSAGE TEXT: *message-text* SQL STATEMENT: *sql-statement* SQLERRP: *error-procedure* SQLERRD: *sqlerrd-fields*

DSNU777I *csect-name* CATMAINT *operation* STATUS *status-msg*

Explanation

This message indicates that the status of a CATMAINT utility operation.

csect-name
The name of the control section that issued the message.

operation
The CATMAINT utility operation that is being processed or encountered an error condition.

status-msg
The status of the *operation* process, or the description of an error condition.

System action

Processing continues.

Administrator response

For nonzero return codes, refer to *status-msg* to determine the action that is required.

Severity

0 (informational) - 12 (severe error)

Related tasks

Updating the catalog for installation or migration to Db2 12 (Db2 Utilities)

Installation step 15: Tailor the Db2 catalog: DSNTIJTC (Db2 Installation and Migration)

Migration step 18: Tailor Db2 11 catalog: DSNTIJTC (Db2 Installation and Migration)

Related reference

CATMAINT (Db2 Utilities)

DSNU778I ***csect-name*** **- ERROR PROCESSING SQL STATEMENT - SQL CODE IS:** ***sql-code*** **SQL MESSAGE TEXT:** ***message-text*** **SQL STATEMENT:** ***sql-statement*** **SQLERRP:** ***error-procedure*** **SQLERRD:** ***sqlerrd-fields***

Explanation

A utility terminated abnormally in the Db2 database services address space (ssnmDBM1) during CATMAINT UPDATE processing.

csect-name
The name of the control section that issued the message.

sql-code
A numeric value that indicates why the SQL statement execution was unsuccessful.

message-text
Indicates the problem with the SQL statement.

sql-statement
The SQL statement that encountered the error.

error-procedure
The name of the procedure that detected the error. This value corresponds to the SQLERRP SQCLCA field.

sqlerrd-fields
A series of fields that contain a values that indicate the number of rows that qualified for the SQL statement, the number of rows in the result table, a rough estimate of required resources, or an internal error code. These values correspond to the SQLERRD(*n*) SQLCA fields.

System action

Utility processing terminates abnormally.

User response

This message is followed by an abend04E reason code 00E40601. Use the *sql-code*, *message-text*, and *sql-statement* listed in this message. See the problem determination text of reason code 00E40601 for additional information.

Severity

0 (informational)

Related tasks

Updating the catalog for installation or migration to Db2 12 (Db2 Utilities)

Related reference

Description of SQLCA fields (Db2 SQL)

Related information

00E40601 (Db2 Codes)

DSNU780I ***csect-name*** **DSNUTILB LEVEL** ***rel1*** **INVALID WITH SUBSYSTEM LEVEL** ***rel2***

Explanation

JCL has been submitted which executes level 'rel1' of DSNUTILB against a level 'rel2' Db2 subsystem. The levels must match.

System action

The utility terminates with a return code of 8.

User response

Determine the Db2 subsystem against which you want to execute. Determine which STEPLIB data set contains the corresponding DSNUTILB load module. Correct the JCL to specify the correct data set on the STEPLIB DD statement and the correct Db2 subsystem on the EXEC statement and resubmit the job.

Severity

8 (error)

DSNU781I ***csect-name*** **RESTART OF LEVEL** ***release-1*** **UTILITY AT LEVEL** ***release-2*** **INVALID**

Explanation

JCL has been submitted which attempts to RESTART a stopped utility on a Db2different release it was originally submitted.

csect-name
The name of the control section that issued the message.

release-1
The release where the utility was originally submitted.

release-2
The release level where the utility cannot be restarted

System action

The utility job abends with reason code X'00E40018'.

User response

Either restart the utility at the same level it was originated or terminate the utility with the TERM command and resubmit it at the new level.

Related tasks

Restarting an online utility (Db2 Utilities)

Related reference

-TERM UTILITY (Db2) (Db2 Commands)

Related information

00E40018 (Db2 Codes)

DSNU782I ***csect-name*** **UNABLE TO RECOVER DUE TO ACTIVITY AT ANOTHER SYSTEM LEVEL**

Explanation

The RECOVER utility is unable to recover the specified table space. Activity at another system level has left all image copies for this table space inconsistent with the Db2 LOG.

System action

The utility terminates with a return code of 8.

User response

The table space, in its entirety can not be recovered. Individual data sets may be recoverable using the DSNUM() keyword.

Severity

8 (error)

DSNU783I ***csect-name*** **INDEXES DSNSCT02, DSNLUX01, DSNLUX02 and DSNLLX02 HAVE SUBPAGES VALUE GREATER THAN 1 AND CANNOT BECOME GROUP BUFFER POOL DEPENDENT.**

Explanation

CATMAINT CONVERT TO TYPE 1 DIRECTORY alters the indexes DSNSCT02, DSNLUX01, DSNLUX02, and DSNLLX02 to type 1 with more than one subpage. In a data sharing environment, there cannot be inter-Db2 R/W interest on type 1 indexes with more than one subpage (they cannot become *group buffer pool dependent*). This means that any read or update request that causes inter-Db2 R/W interest on these directory indexes is denied with a 'resource unavailable' condition.

For directory indexes, only type 2 indexes can have full R/W sharing among data sharing members.

System action

Processing continues.

User response

With very few exceptions, indexes on the directory will have inter-Db2 R/W interest if there are two or more members in your Db2 data sharing group. Use CATMAINT CONVERT TO TYPE 2 DIRECTORY to convert the indexes to type 2 if you plan to have two or more Db2 members.

Severity

4 (warning)

DSNU784I ***csect-name*** **CATMAINT** ***utility-operation*** **- CATALOG CONTAINS UNSUPPORTED OBJECTS:** ***error-text*** **OBJECT NAME -** ***object-name*****, CREATOR -** ***creator-name***

Explanation

The CATMAINT utility halted because the catalog contains an unsupported object or item.

csect-name
The name of the control section that issued the message.

utility-operation
The CATMAINT operation that halted.

error-text
The reason that the operation halted.

object-name
The name of the object.

creator-name
The creator of the object.

System action

Utility processing halts. No SYSABEND dump or SVC dump is requested. Code 00E40601 is issued.

User response

1. Use the DSNTIJPM and DSNTESQ jobs to identify any unsupported items and objects in the subsystem.
2. Remove the unsupported objects and items from the Db2 catalog in the previous release.
3. Retry the failing CATMAINT operation.

Severity

8 (error)

Related reference

CATMAINT (Db2 Utilities)

Related information

00E40601 (Db2 Codes)

DSNU790I ***csect-name utility-name option* IS NOT ALLOWED WHEN THERE ARE OUTSTANDING UTILITIES STARTED FROM PRIOR RELEASES.**

Explanation

The utility to be executed may have conflicts with other outstanding utilities started from prior releases.

utility-name is the name of the utility that detected the conflict.

option is the option specified to the utility that detected the conflict.

System action

The request is rejected.

User response

Use the DISPLAY UTILITY command to see what utilities are outstanding. Issue the TERM UTILITY command on the same release as the release on which the outstanding utility was started.

DSNU795I ***csect-name* - CHECKLOB PHASE COMPLETE - ELAPSED TIME=*time***

Explanation

The CHECK LOB utility CHECKLOB phase was completed with the elapsed time of *time*.

System action

The CHECKLOB phase is completed.

Severity

0 (informational)

DSNU796I ***csect-name* - REPRTLOB PHASE COMPLETE - ELAPSED TIME=*time***

Explanation

The CHECK LOB utility REPRTLOB phase was completed with the elapsed time of *time*.

System action

The REPRTLOB phase is completed.

Severity

0 (informational)

DSNU805I ***csect-name* - TABLE=*table_name* COLUMN=*column_name* IS OUT OF SYNCH ROWID=*rowid* VERSION=*version***

Explanation

The CHECK DATA utility found an auxiliary index entry for the LOB column named *column_name* with ROWID, *rowid*, and version, *version*. The base table row with ROWID, *rowid*, has a version value greater then that of the index record for the column specified.

The state changes below take place if SHRLEVEL REFERENCE is specified or defaulted. If SHRLEVEL CHANGE is specified, the state of the table space remains unchanged.

System action

If AUXERROR REPORT was specified, this error is reported only. The base table space is set to an Aux Check Pending state.

If AUXERROR INVALIDATE was specified, the LOB column is set invalid. The base table space is set to an Aux Warning state.

Programmer response

CHECK DATA relies on information in LOB table space and in the auxiliary index being correct. Before running CHECK DATA to check auxiliary columns, first run CHECK LOB and then run REBUILD INDEX or CHECK INDEX. CHECK LOB ensures the validity of the LOB table space. REBUILD INDEX or CHECK INDEX ensures the validity of the auxiliary index.

If AUXERROR REPORT was specified, run the CHECK DATA utility with AUXERROR INVALIDATE to set the base table column invalid.

If AUXERROR INVALIDATE was specified, use SQL to update the LOB column or delete the base table row. Use REPAIR to delete the LOB from the LOB table space using the ROWID and version reported in the message. Rerun the CHECK DATA utility with AUXERROR INVALIDATE specified. If all Auxiliary Column Check errors were corrected, Aux Warning is reset.

The REPAIR utility can be used to reset the Aux Warning state.

Severity

4 (Warning)

DSNU806I ***csect-name* - TABLE=*table_name* COLUMN=*column_name* WAS SET INVALID ROWID=*rowid* VERSION=*version***

Explanation

The CHECK DATA utility with AUXERROR INVALIDATE specified, set the LOB column named *column_name* invalid. The LOB column was in the row with ROWID, *rowid* in the table named *table_name*. The version for the LOB column was *version*.

System action

Utility returns completion code=4. The base table space is set to a Aux Warning state.

Programmer response

None

Use SQL to update the LOB column or delete the base table row. Rerun the CHECK DATA utility with AUXERROR INVALIDATE specified. If all Auxilary Column Check errors were corrected, Aux Warning will be reset.

The REPAIR utility can be used to reset the Aux Warning state.

DSNU807I ***csect-name* - TABLE=*table_name* COLUMN=*column_name* WAS SET VALID ROWID=*rowid* VERSION=*version***

Explanation

The CHECK DATA utility with AUXERROR INVALIDATE specified, set the LOB column named *column_name* valid. The LOB column was in the row with ROWID, *rowid* in the table named *table_name*. The version for the LOB column was *version*.

System action

Utility returns completion code=4.

Programmer response

None. If all Auxilary Column Check errors were corrected, Aux Warning will be reset.

DSNU809I ***csect-name* - TABLE=*table_name* COLUMN=*column_name* IS MISSING IN INDEX *index-name* ROWID=*rowid* VERSION=*version***

Explanation

The CHECK DATA utility found a record in the table named *table-name* in the row with a ROWID of *rowid*. The column named *column-name* did not have an index entry in the on the auxiliary index named *index-name*. The version for the LOB column was *version*.

The state changes take place if SHRLEVEL REFERENCE is specified or defaulted. If SHRLEVEL CHANGE is specified, the state of the table space remains unchanged.

System action

If AUXERROR REPORT was specified, this error is reported only. The base table space is set to an Aux Check Pending state.

If AUXERROR INVALIDATE was specified, the LOB column is set invalid. The base table space is set to an Aux Warning state.

Utility returns completion code=4.

Programmer response

CHECK DATA relies on information in LOB table space and in the auxiliary index being correct. Before running CHECK DATA to check auxiliary columns, first run CHECK LOB and then run REBUILD INDEX or CHECK INDEX. CHECK LOB ensures the validity of the LOB table space. REBUILD INDEX or CHECK INDEX ensures the validity of the auxiliary index.

If AUXERROR REPORT was specified, run the CHECK DATA utility with AUXERROR INVALIDATE to set the base table column invalid.

If AUXERROR INVALIDATE was specified, use SQL to update the LOB column or delete the base table row. Rerun the CHECK DATA utility with AUXERROR INVALIDATE specified. If all Auxiliary Column Check errors were corrected, Aux Warning will be reset.

The REPAIR utility can be used to reset the Aux Warning state.

DSNU811I ***csect-name* - TABLE=*table_name* COLUMN=*column_name* IS INVALID ROWID=*rowid* VERSION=*version***

Explanation

The CHECK DATA utility found a record in the table named *table-name* in the row with ROWID *rowid*. The column named *column-name* was marked invalid by a prior execution of the CHECK DATA utility with AUXERROR INVALIDATE specified. The version for the LOB column was *version*.

The state changes take place if SHRLEVEL REFERENCE is specified or defaulted. If SHRLEVEL CHANGE is specified, the state of the table space remains unchanged.

System action

Utility returns completion code=4. The base table space is set to a Aux Warning state.

Programmer response

If AUXERROR INVALIDATE was specified, use SQL to update the LOB column or delete the base table row. Rerun the CHECK DATA utility with AUXERROR INVALIDATE specified. If all Auxiliary Column Check errors were corrected, Aux Warning will be reset.

The REPAIR utility can be used to reset the Aux Warning state.

DSNU813I ***csect-name*** **- LOB IN TABLE SPACE=*lob_table_space_name* WITH ROWID=*rowid* AND VERSION=*version* HAS NO BASE TABLE ROW**

Explanation

The CHECK DATA utility found a LOB in the LOB table space named *lob_table_space_name* but did not find a row in the base table for this LOB. The LOB has a ROWID of *rowid* and version of *version*.

The state changes take place if SHRLEVEL REFERENCE is specified or defaulted. If SHRLEVEL CHANGE is specified, the state of the table space remains unchanged.

System action

Utility returns completion code=4.

Programmer response

CHECK DATA relies on information in the index on the auxiliary table and LOB table space being correct. Before running CHECK DATA to check auxiliary columns, first run CHECK LOB and then run REBUILD INDEX or CHECK INDEX. CHECK LOB ensures the validity of the LOB table space. REBUILD INDEX or CHECK INDEX ensures the validity of the auxiliary index.

The LOB can be deleted using the REPAIR utility. Specify LOCATE ROWID VERSION DELETE.

DSNU814I ***csect-name*** **- TABLE=*table_name* COLUMN=*column_name* IS ZERO OR NULL BUT ENTRY IN INDEX *index-name* FOUND ROWID=*rowid* VERSION=*version***

Explanation

The CHECK DATA utility found a record in the table named *table-name* in the row with a ROWID of *rowid*. The column named *column-name* was indicated null or zero length, but an index entry with the same ROWID was found in the index on the auxiliary table named *index-name*. The version for the LOB column was *version*.

The state changes take place if SHRLEVEL REFERENCE is specified or defaulted. If SHRLEVEL CHANGE is specified, the state of the table space remains unchanged.

System action

The fact that a LOB column entry exists in the index on the auxiliary table when the LOB column is marked null or has a null length does not hinder LOB column processing.

If AUXERROR INVALIDATE was specified, the LOB column is not set invalid for this error.

Programmer response

CHECK DATA relies on information in the index on the auxiliary table and LOB table space being correct. If you did not run CHECK LOB followed by REBUILD INDEX or CHECK INDEX prior to running CHECK DATA, then before running CHECK DATA again, run CHECK LOB followed by REBUILD INDEX or CHECK INDEX. CHECK LOB checks the validity of the LOB table space and REBUILD INDEX or CHECK INDEX ensures that the auxiliary index is valid.

The LOB can be deleted from the LOB table space by using REPAIR LOCATE TABLESPACE ROWID DELETE

Severity

4 (warning)

DSNU815I ***csect-name*** **- TABLESPACE *table-space-name* IS IN AUX CHECK PENDING STATE**

Explanation

If the CHECK DATA utility issued the message then the utility found *auxiliary check* errors. *AUXERROR REPORT* was specified, so errors were left as found.

Auxiliary check pending is a prohibitive state.

Previous error messages report the errors found. Regarding other utilities that can tolerate *auxiliary check pending*, the pending state will be reported.

System action

Utility returns completion code 4 or 8.

Programmer response

Use the CHECK DATA with *AUXERROR INVALIDATE*. This will modify the *auxiliary check* errors so they can be corrected and set the state of the table space to *auxiliary warning*.

After running CHECK DATA with *AUXERROR INVALIDATE*, use SQL to update the LOB column or delete the base table row. Rerun the CHECK DATA utility with *AUXERROR INVALIDATE* specified. If all *auxiliary check* errors were corrected, *auxiliary warning* will be reset.

The *auxiliary check pending* state can also be reset using REPAIR with *SET NOAUXCHKP*. Resetting *auxiliary check pending* with REPAIR will have unpredictable results.

DSNU816I ***csect-name*** **- TABLESPACE** ***table-space-name*** **IS IN AUX WARNING STATE**

Explanation

The CHECK DATA utility found *auxiliary check* errors. *AUXERROR INVALIDATE* was specified, so LOB columns in error were marked invalid.

Auxiliary warning is a non-prohibitive state. Updating the LOB column or deleting the row containing the LOB column by SQL is permitted. Valid LOBs may be accessed, however any attempt to retrieve an invalid modified LOB column by SQL will result in a -904 return code.

Previous error messages report the errors found.

System action

Processing continues.

Programmer response

Use SQL to update or delete the LOB columns in error. Use CHECK DATA with AUXERROR INVALIDATE to verify all errors were corrected and to reset the *auxiliary warning* state.

The *auxiliary warning* state can also be reset using REPAIR with *SET NOAUXWARN*.

Severity

0 (informational)

DSNU817I ***csect-name*****- TABLE=*****table-name*** **COLUMN=*****column-name*** **IS COMPLETELY INLINE BUT ENTRY IN INDEX *index-name* FOUND ROWID=*row-id* VERSION=*version***

Explanation

The CHECK DATA utility found a record for a row whose column was indicated to be completely inline, but an index entry with the same ROWID was found in the index on the auxiliary table.

csect-name
The name of the control section that issued the message.

table-name
The name of the table.

column-name
The name of the column.

index-name
The name of the index on the auxiliary table.

row-id
The ROWID of the row.

version
The version for the LOB column.

System action

LOB column processing is unaffected. If the AUXERROR INVALIDATE option was specified, the LOB column is not set to an invalid status for this error.

Programmer response

CHECK DATA relies on information in the index on the auxiliary table and LOB table space being correct. To ensure that this information is correct:

1. Run CHECK LOB to check the validity of the LOB table space.
2. Run either REBUILD INDEX or CHECK INDEX to ensure that the auxiliary index is valid.
3. Run CHECK DATA.

Severity

4 (warning)

Related reference
CHECK DATA (Db2 Utilities)
CHECK INDEX (Db2 Utilities)
CHECK LOB (Db2 Utilities)
REBUILD INDEX (Db2 Utilities)

DSNU820I **XML COLUMN *column-name* IN TABLE *tbcreator*.*tbname* INVALID. DOCID *DocId hex-string***

Explanation

This message is issued when an XML column value is marked invalid. The column was marked invalid during

previous CHECK DATA processing for AUXERROR INVALIDATE, or XMLERROR INVALIDATE.

The state changes take place if SHRLEVEL REFERENCE is specified or defaulted. If SHRLEVEL CHANGE is specified, the state of the table space remains unchanged.

System action

The XML table space is set to *Aux Warning*.

Programmer response

You must replace the XML column, or delete the row containing the XML column. Use SQL to make the XML valid.

Severity

4 (warning)

DSNU822I **XML COLUMN *column-name* IN TABLE *tbcreator*.*tbname* IS MISSING IN INDEX *ixcreator*.*ixname* DOCID *DocId-hex-string***

Explanation

This message is issued when a base table row contains an XML column value, but no index entry is found for the XML column value in the NODEID index.

The state changes take place if SHRLEVEL REFERENCE is specified or defaulted. If SHRLEVEL CHANGE is specified, the state of the table space remains unchanged.

System action

If you specified AUXERROR REPORT, then only this error is reported. The base table space is set to an *auxiliary check pending* state. If you specified AUXERROR INVALIDATE, then the XML column is set to invalid. The base table space is set to an *auxiliary warning* state.

Programmer response

Before running CHECK DATA to check the auxiliary columns, run REBUILD INDEX or CHECK INDEX. REBUILD INDEX or CHECK INDEX ensures the validity of the auxiliary index.

If you specified AUXERROR REPORT, run the CHECK DATA utility with AUXERROR INVALIDATE in order to set the base table column to invalid.

If you specified AUXERROR INVALIDATE, use SQL to update the XML column, or delete the base table row. Run the CHECK DATA utility again, with AUXERROR INVALIDATE specified.

If all auxiliary column check errors were corrected, *auxiliary warning* will be reset.

Severity

4 (warning)

DSNU823I ***csect-name* ORPHANED XML DOCUMENT FOUND FOR XML COLUMN *column-name* IN BASE TABLE *creator-name.table-name*, DOCID *document-id***

Explanation

The CHECK DATA utility found an XML document in the XML table space, but the document is not referenced by a base table row.

csect-name
The name of the control section that issued the message.

column-name
The name of the XML column.

creator-name.table-name
The name of the table, qualified by the name of the creator of the table.

document-id
The hexadecimal document identifier that is specified for the XML document.

System action

Processing continues until you receive completion code 4.

The state changes take place if SHRLEVEL REFERENCE is specified or is the default option. If SHRLEVEL CHANGE is specified, the state of the table space remains unchanged.

This is an informational message. XML processing is not hindered because an XML column entry exists in the node ID index, but not in the base table.

Programmer response

To delete the orphaned XML document, run REPAIR LOCATE TABLESPACE *xml-tablespace* DOCID *document-id* DELETE.

Severity

4 (warning)

Related reference
REPAIR (Db2 Utilities)

DSNU824I **XML COLUMN *column-name* IN TABLE *crname*, *tbname* IS NULL BUT ENTRY IN INDEX *crname*, *ixname* FOUND. DOCID *DocId-hex-string***

Explanation

This message is issued when a row in an XML table exists, but it is not referenced by a base table row.

The state changes take place if SHRLEVEL REFERENCE is specified or defaulted. If SHRLEVEL CHANGE is specified, the state of the table space remains unchanged.

System action

Processing continues. This is an informational message. XML processing is not hindered because an XML column entry exists in the auxiliary index, but the XML column in the base table is marked null or has a null length.

Programmer response

Before running CHECK DATA to check the auxiliary columns, run REBUILD INDEX or CHECK INDEX. REBUILD INDEX or CHECK INDEX ensures the validity of the auxiliary index.

Severity

4 (warning)

DSNU826I **XML COLUMN *column name* IN TABLE *tbcreator*, *tbname* HAS BEEN MARKED INVALID BY THE CHECK UTILITY. DOCID *DocId hex string***

Explanation

This message is issued when an XML column value is marked invalid during CHECK DATA processing for `AUXERROR INVALIDATE` or `XMLERROR INVALIDATE`.

System action

The base table space is set to Aux Warning.

Programmer response

You must replace the XML column or delete the row containing the XML. Use SQL to remove the invalid indication.

Severity

4 (warning)

DSNU827I ***csect-name*- XML COLUMN*column-name* FOR TABLE *creator-name.table-name* WAS SET VALID. DOCID *document-id***

Explanation

An XML column value that had previously been marked "invalid" has been changed to "valid" during CHECK DATA utility processing for either AUXERROR INVALIDATE or XMLERROR INVALIDATE.

csect-name
The name of the control section that issued the message.

column-name
The name of the XML column.

creator-name.table-name
The name of the table, qualified by the name of the creator of the table.

document-id
The hexadecimal document identifier.

System action

The auxiliary warning status is reset if no invalid columns remain.

User response

No action is required.

Severity

4 (warning)

Related reference
CHECK DATA (Db2 Utilities)
Auxiliary warning status (Db2 Utilities)

DSNU830I ***csect-name* - INDEX= *index-name* IS IN REBUILD PENDING STATE**

Explanation

If the RECOVER utility issued this message, the corresponding table space to this index was recovered to a point in time with keyword TOCOPY, TOLOGPOINT, or TORBA. Thus, the index was placed in rebuild pending status.

If the REBUILD INDEX utility issued this message, the index is in rebuild pending status. Either duplicate index entries existed during the BUILD phase of the REBUILD INDEX, or invalid KEY/RIDs, which do not belong to the partition of the cluster index, were detected. The duplicate index entries or invalid KEY/RID entries must be resolved before starting the

REBUILD INDEX utility again to rebuild the index and remove the index from rebuild pending status.

If the REORG utility with SHRLEVEL REFERENCE or CHANGE (or -TERM UTILITY) issued this message, the index is in rebuild pending status. During the renaming of a data set during REORG, either a data set with the source name did not yet exist or a data set with the target name already existed.

User response

If the RECOVER or REORG utility (or -TERM UTILITY) issued this message, use the REBUILD INDEX utility to rebuild this index.

If the REBUILD INDEX utility issued this message resolve the duplicate index entries or invalid keys and rerun the REBUILD INDEX utility.

Severity

4 (warning) or 8 (error)

DSNU831I ***csect-name*** **ALL INDEXES OF TABLESPACE=** ***table space-name*** **ARE IN REBUILD PENDING**

Explanation

The RECOVER TORBA, TOLOGPOINT, or TOCOPY utility issues this message to inform the user of the state of all indexes belonging to the recovered table space. All indexes were put in rebuild pending status to prevent data and index inconsistency. All indexes should be rebuilt before they are used.

System action

The RECOVER utility completed successfully.

User response

Use the REBUILD utility with the ALL option to rebuild all indexes over the recovered table space.

Severity

4 (warning)

DSNU832I ***csect-name*** **- INDEX=** ***creator.index-name*** **PART=** ***partition-number*** **IS IN REBUILD PENDING STATE**

Explanation

If the RECOVER utility issued this message, one partition of a partitioned table space is being recovered to a point in time with keyword TOCOPY, TOLOGPOINT, or TORBA. The corresponding index for that partition was placed in rebuild pending status.

If the REBUILD INDEX utility issued this message, the index or the partition of a cluster index is in rebuild pending status. Either duplicate index entries existed during the BUILD phase of the REBUILD INDEX or INDEX PART, or invalid KEY/RIDs, which do not belong to the partition of the cluster index, were detected. The duplicate index entries or invalid KEY/RID entries must be resolved before starting the REBUILD INDEX utility again to rebuild the index and remove the index from rebuild pending status.

If the REORG utility with SHRLEVEL REFERENCE or CHANGE (or -TERM UTILITY) issued this message, one partition of a partitioned index was placed in rebuild pending status. During the renaming of a data set during REORG, either a data set with the source name did not yet exist or a data set with the target name already existed.

User response

If the RECOVER or REORG utility (or -TERM UTILITY) issued the message, rebuild this index with the REBUILD INDEX utility.

If the REBUILD INDEX utility issued this message resolve duplicate index entries or invalid keys and rerun the REBUILD INDEX utility.

Severity

4 (warning) or 8 (error)

DSNU833I ***csect-name*** **- UNABLE TO RECOVER** ***object-type object-name*** **DUE TO ALTER COLUMN**

Explanation

RECOVER utility is unable to recover the index or index space as requested because an ALTER COLUMN VARCHAR has been performed. The current column definition is no longer consistent with the image copy and log records which would be used to perform the requested recovery.

User response

Use the REBUILD INDEX utility to rebuild the index from the tablespace.

Severity

8 (error)

DSNU834I ***csect-name*** **- UNABLE TO RECOVER** ***object-type object-name***

DSNUM *dsnum* DUE TO ALTER COLUMN

Explanation

RECOVER utility is unable to recover the index or index space partition as requested because an ALTER COLUMN VARCHAR has been performed. The current column definition is no longer consistent with the image copy and log records which would be used to perform the requested recovery.

User response

Use the REBUILD INDEX utility to rebuild the index partition from the tablespace.

Severity

8 (error)

DSNU840I ***csect-name* BASE TABLE SPACE *database-name.space-name* IS MISSING IN TABLE SPACE LIST FOR XML TABLE SPACE *database-name.space-name*. BASE TABLE=*creator-name.table-name*, XML COLUMN=*column-name***

Explanation

An XML table space is specified by the INCLUDE XML TABLESPACES clause of the CHECK DATA utility, but no corresponding base table space is specified.

csect-name
The name of the control section that issued the message.

database-name.space-name
The name of the table space, qualified by the name of the database. This information is provided first for the base table space and then for the XML table space.

creator-name.table-name
The name of the base table, qualified by the name of the creator of the table.

column-name
The name of the XML column.

System action

Processing continues, but the indicated XML table space is not checked.

System programmer response

Either add the missing base table space to the TABLESPACE keyword or remove the XML table space from the INCLUDE XML TABLESPACES list.

Severity

4 (warning)

Related reference
CHECK DATA (Db2 Utilities)

DSNU841I ***csect-name* XML TABLE SPACE *database-name.space-name* IS NOT CHECK PENDING. BASE TABLE=*creator-name.table-name*, XML COLUMN=*column-name***

Explanation

During processing with the INCLUDE XML TABLESPACES and SCOPE PENDING options, the CHECK DATA utility determined that an XML table space is not in a check pending state.

csect-name
The name of the control section that issued the message.

database-name.space-name
The name of the XML table space, qualified by the name of the database.

creator-name.table-name
The name of the base table, qualified by the name of the creator of the table.

column-name
The name of the XML column.

System action

The utility skips the XML table space and continues processing.

System programmer response

No action is required.

Severity

4 (warning)

Related reference
CHECK DATA (Db2 Utilities)

DSNU842I ***csect-name* CHECKING XML TABLE SPACE *database-name.space-name* OF XML COLUMN *column-name***

Explanation

The CHECK DATA utility is checking the XML table space for structurally defective documents.

csect-name
The name of the control section that issued the message.

database-name.space-name
The name of the XML table space that is being checked, qualified by the name of the database.

column-name
The name of the XML column.

System action

Processing continues.

User response

No action is required.

Severity

0 (informational)

Related reference
CHECK DATA (Db2 Utilities)

DSNU843I ***csect-name*** **CHECKING XML TABLE SPACE** ***database-name.space-name*** **OF XML COLUMN** ***column-name*** **WAS COMPLETED SUCCESSFULLY**

Explanation

The CHECK DATA utility has successfully completed the check of the XML table space for structurally defective documents.

csect-name
The name of the control section that issued the message.

database-name.space-name
The name of the XML table space that was checked, qualified by the name of the database.

column-name
The name of the XML column.

System action

Processing continues with the next XML table space.

User response

No action is required.

Severity

0 (informational)

Related reference
CHECK DATA (Db2 Utilities)

DSNU844I ***csect-name*** **CORRUPTED XML DOCUMENT IN XML TABLE SPACE** ***database-name.space-name*** **FOR XML COLUMN** ***column-name*** **FOUND. DOCID** ***document-id***

Explanation

The CHECK DATA utility found a corrupted XML document.

csect-name
The name of the control section that issued the message.

database-name.space-name
The name of the XML table space that was checked, qualified by the name of the database.

column-name
The name of the XML column.

document-id
The hexadecimal document identifier.

System action

The system action depends on options that were specified for the CHECK DATA utility:

SHRLEVEL REFERENCE and either AUXERROR REPORT or XMLERROR REPORT
This error is reported, and the base table space is set to an auxiliary check pending state if CHECK DATA is configured to place table spaces in a check pending state (subsystem parameter CHECK_SETCHKP=YES).

SHRLEVEL REFERENCE and either AUXERROR INVALIDATE or XMLERROR INVALIDATE
The corrupted XML document is deleted from the XML table space, the XML column is set to an invalid state, and the base table space is set to an auxiliary warning state.

User response

Take the appropriate action for the CHECK DATA option that was specified:

SHRLEVEL REFERENCE and either AUXERROR REPORT or XMLERROR REPORT
Run the CHECK DATA utility with either the AUXERROR INVALIDATE option or the XMLERROR INVALIDATE option to delete the invalid XML document and set the base table XML column to an invalid state.

SHRLEVEL REFERENCE and either AUXERROR INVALIDATE or XMLERROR INVALIDATE
Either update the XML column or delete the base table row. Then run the CHECK DATA utility with the AUXERROR INVALIDATE option. If all XML

documents are structurally valid, the auxiliary warning status will be reset.

Severity

4 (warning)

Related reference

CHECK DATA (Db2 Utilities)

DSNU845I ***csect-name* XML DOCUMENT IS MISSING FOR XML COLUMN *column-name* IN BASE TABLE *creator-name.table-name*. DOCID *document-id***

Explanation

A base table row contains an XML document, but the XML document is not found in the corresponding XML table.

csect-name
The name of the control section that issued the message.

column-name
The name of the XML column.

creator-name.table-name
The name of the base table, qualified by the name of the creator of the table.

document-id
The hexadecimal document identifier.

System action

The system action depends on the SHRLEVEL option that was specified:

SHRLEVEL REFERENCE and either AUXERROR REPORT or XMLERROR REPORT
This error is reported, and the base table space is set to an auxiliary check pending state if CHECK DATA is configured to place table spaces in a check pending state (subsystem parameter CHECK_SETCHKP=YES).

SHRLEVEL REFERENCE and either AUXERROR INVALIDATE or XMLERROR INVALIDATE
The XML column is set to an invalid state, and the base table space is set to an auxiliary warning state.

Programmer response

Take the appropriate action for the SHRLEVEL option that was specified:

SHRLEVEL REFERENCE and either AUXERROR REPORT or XMLERROR REPORT
Run the CHECK DATA utility with the SHRLEVEL REFERENCE and either AUXERROR INVALIDATE or XMLERROR INVALIDATE options to set the base table XML column to an invalid state.

SHRLEVEL REFERENCE and either AUXERROR INVALIDATE or XMLERROR INVALIDATE
Either update the XML column or delete the base table row. Then run the CHECK DATA utility with the SHRLEVEL REFERENCE and either AUXERROR INVALIDATE or XMLERROR INVALIDATE options. If all XML errors were corrected, the auxiliary warning status will be reset.

Severity

4 (warning)

Related concepts

XML schema validation with an XML type modifier (Db2 Programming for XML)

Related reference

CHECK DATA (Db2 Utilities)

DSNU846I ***csect-name* XML DOCUMENTS DELETED FROM TABLE *creator-name.table-name* FOR XML COLUMN *column-name***

Explanation

This message is issued by the CHECK DATA utility when XML documents have been deleted because of XML schema validation errors.

csect-name
The name of the control section that issued the message.

creator-name.table-name
The name of the table, qualified by the name of the creator of the table.

column-name
The name of the column.

The number of XML documents deleted from the table is equal to the number of XML documents inserted into the corresponding XML exception table. Message DSNU848I provides the name of the corresponding XML exception table. XML documents of one XML column will copied to their corresponding XML exception table.

System action

Processing continues.

System programmer response

No action is required.

Severity

4 (warning)

Related reference

CHECK DATA (Db2 Utilities)

Related information

DSNU848I

csect-name XML EXCEPTION TABLE *creator-name.table-name* CREATED FOR XML COLUMN *column-name* IN BASE TABLE *creator-name.table-name*

DSNU848I ***csect-name* XML EXCEPTION TABLE *creator-name.table-name* CREATED FOR XML COLUMN *column-name* IN BASE TABLE *creator-name.table-name***

Explanation

When running with SHRLEVEL REFERENCE and AUXERROR/XMLERROR INVALIDATE, or with SCOPE XMLSCHEMAONLY, CHECK DATA performs XML schema validation against XML documents of XML columns having set an XML type modifier. In case of an XML schema validation error, CHECK DATA implicitly creates an XML exception table (XET), which contains a copy of the affected XML document. Each XML column will have its own corresponding XET object.

csect-name
The name of the control section that issued the message.

creator-name.table-name
The name of the table, qualified by the name of the creator of the table. This information is provided for the exception table and for the base table.

column-name
The name of the column.

System action

Processing continues.

System programmer response

No action is required.

Severity

0 (informational)

DSNU849I ***csect-name* XML DOCUMENT WITH DOCID *document-id* IS NOT VALID AGAINST THE XML TYPE MODIFIER OF XML COLUMN *column-name* FOR TABLE *creator-name.table-name***

Explanation

The CHECK DATA utility found an XML document that is not valid for the XML type modifier of an XML column.

csect-name
The name of the control section that issued the message.

document-id
The hexadecimal document identifier.

column-name
The name of the XML column.

creator-name.table-name
The name of the table, qualified by the name of the creator of the table.

System action

The system action depends on options that were specified for the CHECK DATA utility:

AUXERROR REPORT
This error is reported, and the base table space is set to an auxiliary check pending state if CHECK DATA is configured to place table spaces in a check pending state (subsystem parameter CHECK_SETCHKP=YES).

AUXERROR INVALIDATE
The XML document that is in violation of the schema is copied to the XML exception table and is deleted from the XML table space. The base table XML column is set to an invalid state, and the base table space is set to an auxiliary warning state.

User response

Take the appropriate action for the CHECK DATA option that was specified:

AUXERROR REPORT
Run the CHECK DATA utility with the AUXERROR INVALIDATE option to copy the XML document that is in violation to the XML exception table, delete it from the XML table space, and set the base table XML column to an invalid state.

AUXERROR INVALIDATE
Either update the XML column with a document that is valid for the XML type modifier, or delete the base table row. Then run the CHECK DATA utility with the AUXERROR INVALIDATE option. If all XML documents are valid for their XML type modifiers, the auxiliary warning status will be reset.

Severity

4 (warning)

Related concepts

XML schema validation with an XML type modifier (Db2 Programming for XML)

Related reference

CHECK DATA (Db2 Utilities)

DSNU850I ***csect-name*** **INDEX** ***creator-name.index-name*** **SHOULD BE REBUILT**

Explanation

An inconsistent index was found.

csect-name
The name of the control section that issued the message.

creator-name.index-name
The name of the index, qualified by the name of the creator of the index.

System action

The status of the index is not changed.

User response

Run the REBUILD INDEX utility on the index.

Severity

4 (warning)

Related reference

REBUILD INDEX (Db2 Utilities)

DSNU851I ***csect-name*** **RECORD** ***record-id*** **CANNOT BE LOCATED USING HASH ACCESS ON TABLE** ***table-name*****, REASON CODE:** ***reason-code***

Explanation

The CHECK DATA utility identified a problem with data in a table that is organized by hash. The indicated record could not be found using hash access.

csect-name
The name of the control section that issued the message.

record-id
The record ID that could not be found.

table-name
The name of the table.

reason-code
The Db2 reason code value that indicates the reason for the failure. For explanations of reason codes, see Db2 reason codes (Db2 Codes).

System action

Utilities continue to process.

User response

No action is required.

Severity

0 (informational)

Related concepts

Db2 reason codes (Db2 Codes)

Related reference

CHECK DATA (Db2 Utilities)

DSNU852I ***csect-name*** **RECORD** ***record-id*** **FOR PARTITION** ***partition-number*** **CANNOT BE LOCATED USING HASH ACCESS ON TABLE** ***table-name*****, REASON CODE:** ***reason-code***

Explanation

The CHECK DATA utility identified a problem with hash data. The indicated record could not be found using hash access.

csect-name
The name of the control section that issued the message.

record-id
The record ID that could not be found.

partition-number
The partition number.

table-name
The name of the table.

reason-code
The Db2 reason code value that indicates the reason for the failure. For explanations of reason codes, see Db2 reason codes (Db2 Codes).

System action

Utilities continue to process.

User response

No action is required.

Severity

0 (informational)

DSNU853I ***csect-name*** **THE LOCATED RECORD** ***record-id*** **HAS A DIFFERENT RID OR KEY THAN THE UNLOADED ROW, REASON CODE:** ***reason-code***

Explanation

The CHECK DATA utility identified a problem with hash data. The unloaded record has a different record ID (RID) or key than the record that was found using hash access.

csect-name
The name of the control section that issued the message.

record-id
The record ID that could not be found.

reason-code
The Db2 reason code value that indicates the reason for the failure. For explanations of reason codes, see Db2 reason codes (Db2 Codes).

System action

Utilities continue to process.

User response

No action is required.

Severity

0 (informational)

Related concepts
Db2 reason codes (Db2 Codes)
Related reference
CHECK DATA (Db2 Utilities)

DSNU860I ***csect-name*** **DIAGNOSE UTILITY COMPLETE**

Explanation

This message is issued in response to the normal completion of the DIAGNOSE utility.

System action

This message indicates the normal completion of the DIAGNOSE utility. Processing continues to the next utility statement in the utility job step.

Severity

0 (informational)

DSNU861I **DISPLAY MEPL FOR SYSTEM** ***name***

Explanation

This is the header message for output of the DIAGNOSE DISPLAY MEPL function. The contents of the MEPL is dumped to SYSPRINT.

The contents of the MEPL for subsystem *name* is dumped to SYSPRINT.

System action

This message indicates the beginning of DIAGNOSE DISPLAY MEPL processing.

Severity

0 (informational)

DSNU862I **DISPLAY AVAILABLE UTILITIES. MAP:** ***bit-map***

Explanation

This message is the end-result of a DIAGNOSE DISPLAY AVAILABLE control statement. It displays the utilities that are available on this subsystem. The message contains a machine-readable bit-map, and precedes a table of utility names. They are two representations of the same information. An available utility is represented by the utility name that appears in the table and a "1" in the corresponding bit position in the bit-map. An unavailable utility is represented by a blank table entry and a "0" in the corresponding bit position in the bit-map.

Utilities may be unavailable if separately-priced features JDB771K and/or JDB771M are not installed, or installed improperly.

The table position and bit position are fixed for any given utility, and maintenance cannot alter them. Bit positions correspond to table entries when you read the table across each row, left to right, starting with the top row. For example, bit 1 corresponds to CATMAINT, bit 2 to CHECK, and bit 9 to OPTIONS.

The following example shows the partial output of this message. Due to space constraints, the sample has been truncated and broken into two rows. The actual table contains eight columns of identity names, and will display all eight columns horizontally across:

```
DSNU862I  DSNUDIAG - DISPLAY AVAILABLE
UTILITIES.
  MAP: 11111111111111111111110000000000000
-------------------------------------------------
|CATMAINT |CHECK    |COPY     |DIAGNOSE |
LISTDEF|
|OPTIONS  |QUIESCE  |REBUILD  |RECOVER  |REORG
|
|STOSPACE |TEMPLATE |UNLOAD   |COPYTOCOP|EXEC
|
|         |         |         |         |
|
-------------------------------------------------
```

```
-


-----------------------------------------------
|LOAD     |MERGE    |COPY     |MODIFY   |
|
|REPAIR   |REPORT   |RUNSTATS |         |
|
|BACKUP   |RESTORE  |         |         |
|
|         |         |         |         |
|
-----------------------------------------------
-
```

System action

The DIAGNOSE DISPLAY AVAILABLE utility control statement has completed normally.

Severity

0 (informational)

DSNU863I ***csect-name*** **DISPLAY OBD** ***dbname.tsname***

Explanation

This message is the heading message for DIAGNOSE DISPLAY OBD output.

System action

This message indicates the start of the output for the DIAGNOSE DISPLAY OBD function.

Severity

0 (informational)

DSNU864I ***csect-name*** **DISPLAY OBD, DBID=*nn* OBID=*nn* OBD TYPE=*type***

Explanation

This message is the heading message for the OBD being displayed.

System action

This message identifies the OBD being displayed.

Severity

0 (informational)

DSNU865I ***csect-name*** **DISPLAY OBD** ***dbname.tsname*** **COMPLETE**

Explanation

This message is issued in response to normal completion of DISPLAY OBD processing.

System action

This message indicates the end of DISPLAY OBD processing.

Severity

0 (informational)

DSNU866I ***csect-name*** **DISPLAY SYSUTIL JOB INFORMATION**

Explanation

This message is the header message for the SYSUTIL JOB INFORMATION section of the DIAGNOSE DISPLAY SYSUTIL output. This section displays the job information area of the SYSUTIL record and contains information which identifies the utility the SYSUTIL record is referencing.

System action

This message identifies the SYSUTIL JOB INFORMATION section of the DIAGNOSE DISPLAY SYSUTIL output.

Severity

0 (informational)

DSNU867I ***csect-name*** **DISPLAY SYSUTIL CHECKPOINT/RESTART INFORMATION**

Explanation

This message is the header message for the SYSUTIL UTILITY CHECKPOINT/RESTART INFORMATION section of the DIAGNOSE DISPLAY SYSUTIL output. This section displays the utility checkpoint/restart area of the SYSUTIL record and contains information pertaining to utility processing needed for the restart of the utility.

System action

This message identifies the SYSUTIL UTILITY CHECKPOINT/RESTART INFORMATION section of the DIAGNOSE DISPLAY SYSUTIL output.

Severity

0 (informational)

DSNU868I ***csect-name*** **DISPLAY SYSUTIL UTILITY DEPENDENT AREA**

Explanation

This message is the header message for the SYSUTIL UTILITY DEPENDENT INFORMATION section of the DIAGNOSE DISPLAY SYSUTIL output. This section displays the utility dependent area of the SYSUTIL record and contains information particular to the utility which the SYSUTIL record is referencing.

System action

This message identifies the SYSUTIL UTILITY DEPENDENT INFORMATION section of the DIAGNOSE DISPLAY SYSUTIL output.

Severity

0 (informational)

DSNU869I ***csect-name*** **DISPLAY SYSUTIL COMPLETE**

Explanation

This message is issued in response to normal completion of DISPLAY SYSUTIL processing.

System action

This message indicates the end of DISPLAY SYSUTIL processing.

Severity

0 (informational)

DSNU870I ***csect-name*** **NO SYSUTIL RECORD FOUND**

Explanation

This message is issued if no SYSUTIL records are found when DISPLAY SYSUTIL is specified.

System action

This message indicates the end of DISPLAY SYSUTIL processing.

Severity

4 (warning)

DSNU871I ***csectname*** **DISPLAY DBET DATABASE** ***dbname***

Explanation

This message is the heading for display output of the database exception table (DBET) entry associated with database *dbname*.

System action

DIAGNOSE DISPLAY DBET processing started for the named database.

Severity

0 (informational)

DSNU872I ***csectname*** **DISPLAY DBET TABLE SPACE** ***tsname***

Explanation

This message is the heading for display output of the database exception table (DBET) entry associated with table space *tsname*.

System action

DIAGNOSE DISPLAY DBET processing started for the named table space.

Severity

0 (informational)

DSNU873I ***csectname*** **DISPLAY DBET INDEX** ***index-name***

Explanation

This message is the heading for display output of the database exception table (DBET) entry associated with index *index-name*.

System action

DIAGNOSE DISPLAY DBET processing started for the named index.

Severity

0 (informational)

DSNU874I ***csectname*** **NO DBET ENTRY FOUND FOR THE SPECIFIED OBJECT**

Explanation

There is no database exception table (DBET) entry associated with the specified object.

System action

Processing continues normally.

Severity

4 (warning)

DSNU875I ***csectname*** **DIAGNOSE WAIT AT MESSAGE=*msgno* INSTANCE=*nn* CORR ID=*id1* CONN ID=*id2* REPLY TO CONT**

Explanation

The DIAGNOSE WAIT function was invoked to wait at a specified message 'msgno' on the nn'th time that message was issued. The CORR ID is the correlation identifier of the thread associated with the waiting application. The CONN ID is the connection identifier of the thread.

System action

Processing is stopped until the user responds to this message.

Operator response

After diagnosis procedure in progress is completed, reply to this message to continue execution. Any reply is valid.

User response

See operator response.

Severity

4 (warning)

DSNU876I ***csectname*** **DIAGNOSE WAIT AT TRACEID=X'trcid' INSTANCE=*nn* CORR ID=*id1* CONN ID=*id2* REPLY TO CONT**

Explanation

The DIAGNOSE WAIT function was invoked to wait at a specified traceid 'trcid' on the nn'th time that traceid was encountered. The CORR ID is the correlation identifier of the thread associated with the waiting application. The CONN ID is the connection identifier of the thread.

System action

Processing is stopped until the user responds to this message.

Operator response

After diagnosis procedure in progress is complete, reply to this message to continue execution. Any reply is valid.

User response

See operator response.

Severity

4 (warning)

DSNU877I **event modulename+offset**

Explanation

Event 'event' occurred at module 'modulename' plus 'offset'. The DIAGNOSE utility issues this message to aid in diagnosing utility problems.

System action

Processing continues normally.

Severity

0 (informational)

DSNU899I ***csect-name*** **- DRAIN_WAIT =** ***s*** **SECONDS RETRY =** ***r*** **ATTEMPTS RETRY_DELAY =** ***d*** **SECONDS**

Explanation

This informational message displays the most recently specified values for certain parameters of the REBUILD INDEX utility. This information is displayed in response to a DISPLAY UTILITY command and reflects the state of Db2 at the time that the command was issued.

For each parameter, the value that is displayed might be a result of an ALTER UTILITY command that changed the parameter value. If no such command changed the value, the value displayed is the one that was specified in the original REBUILD INDEX statement.

s
The number of seconds that REBUILD INDEX is to wait when draining the table space or index.

r
The maximum number of retries that REBUILD INDEX is to attempt.

d
The minimum duration, in seconds, between retries.

This message is displayed only for REBUILD INDEX with the SHRLEVEL CHANGE option. It supplements message DSNU105I, which can apply to any utility, including REBUILD INDEX.

System action

Processing continues.

User response

No action is required.

Severity

0 (informational)

Related reference

Syntax and options of the REBUILD INDEX control statement (Db2 Utilities)

DSNU900I ***csect-name*** **- DBD X'xxxx' COMPARISON STARTING**

Explanation

This message marks the start of a DBD comparison for the REPAIR DBD TEST or REPAIR DBD DIAGNOSE utility. The DBID of the DBD being compared against the Db2 Catalog is 'xxxx'.

System action

DBD checking continues normally.

Severity

0 (informational)

DSNU901I ***csect-name*** **- OBD X'xxxx'** ***obd-type*** **HAS THE FOLLOWING DIFFERENCES**

Explanation

This message marks the start of an OBD comparison for the REPAIR DBD TEST or REPAIR DBD DIAGNOSE utility. This message is displayed when a difference in the OBDs has been detected. The OBID of the OBD being compared against the Db2 catalog is 'xxxx'. The type of OBD being displayed is 'obd-type'.

System action

DBD checking continues normally.

Severity

0 (informational)

DSNU902I ***csect-name*** **- EXISTING OBD AT OFFSET X'xxxxxxxx' IN EXISTING DBD**

Explanation

Following this message is a hexadecimal dump of the OBD as it exists in the DSNDB01.DBD01 page set. In the message, 'xxxxxxxx' is the hexadecimal offset from the beginning of the existing DBD as it appears later in the REPAIR DBD DIAGNOSE output.

System action

DBD checking continues normally.

Severity

0 (informational)

DSNU903I ***csect-name*** **- REBUILT OBD AT OFFSET X'xxxxxxxx' IN REBUILT DBD**

Explanation

Following this message is a hexadecimal dump of the OBD that was rebuilt from the Db2 Catalog. In the message, 'xxxxxxxx' is the hexadecimal offset from the beginning of the rebuilt DBD as it appears later in the REPAIR DBD DIAGNOSE output.

System action

DBD checking continues normally.

Severity

0 (informational)

DSNU904I ***csect-name*** **- EXISTING VALUE X'xx..xx'**

Explanation

This message shows a hexadecimal string which is the value of a field in the OBD as it exists on the DSNDB01.DBD01 page set. The hexadecimal string is 'xx..xx'.

System action

DBD checking continues normally.

Severity

0 (informational)

DSNU905I ***csect-name*** **- REBUILT VALUE X'xx..xx'**

Explanation

This message shows a hexadecimal string which is the value of a field in the OBD which was rebuilt from the Db2 catalog. The hexadecimal string is 'xx..xx'.

System action

DBD checking continues normally.

Severity

0 (informational)

DSNU906I ***csect-name*** **- EXISTING VALUE 'cc..cc'**

Explanation

This message shows a character string which is the value of a field in the OBD as it exists on the DSNDB01.DBD01 page set. The character string is 'cc..cc'.

System action

DBD checking continues normally.

Severity

0 (informational)

DSNU907I ***csect-name*** **- REBUILT VALUE 'cc..cc'**

Explanation

This message shows a character string which is the value of a field in the OBD which was rebuilt from the Db2 catalog. The character string is 'cc..cc'.

System action

DBD checking continues normally.

Severity

0 (informational)

DSNU908I ***csect-name*** **- EXISTING OBD IS** ***obd-type***

Explanation

This message shows the OBD type of the OBD which exists on the DSNDB01.DBD01 page set.

System action

DBD checking continues normally.

Severity

0 (informational)

DSNU909I ***csect-name*** **- REBUILT OBD IS** ***obd-type***

Explanation

This message shows the OBD type of the OBD which was rebuilt from the Db2 catalog.

System action

DBD checking continues normally.

Severity

0 (informational)

DSNU910I ***csect-name*** **- EXISTING DBD**

Explanation

Following this message is a hexadecimal dump of the DBD which exists on the DSNDB01.DBD01 page set.

System action

DBD checking continues normally.

Severity

0 (informational)

DSNU911I ***csect-name*** **- REBUILT DBD**

Explanation

Following this message is a hexadecimal dump of the DBD which was rebuilt from the Db2 Catalog.

System action

DBD checking continues normally.

Severity

0 (informational)

DSNU912I ***csect-name - phase-completion-message -- nn*** **ERRORS WERE FOUND**

Explanation

This message marks the end of a processing phase in the DBD comparison for a REPAIR DBD TEST or REPAIR DBD DIAGNOSE utility. In the message, 'nn' indicates the number of errors detected while processing. Informational and warning messages are not added into the error count.

System action

DBD checking continues normally.

Severity

0 (informational)

DSNU913I ***csect-name*** **- OBD X'xxxx' COMPARISON COMPLETE --** ***nn*** **ERRORS WERE FOUND**

Explanation

This message marks the end of an OBD comparison for the REPAIR DBD TEST or REPAIR DBD DIAGNOSE utility. This message is displayed only when a difference has been detected. If there is no difference, this message will not be displayed. The OBID of the OBD being compared against the Db2 catalog is 'xxxx'. The number of errors in this OBD is 'nn'. Informational and warning messages are not added into the error count.

System action

DBD checking continues normally.

Severity

0 (informational)

DSNU914I ***csect-name*** **- DBD X'xxxx' COMPARISON COMPLETE --** ***nn*** **ERRORS WERE FOUND**

Explanation

This message marks the end of a DBD comparison for the REPAIR DBD TEST or REPAIR DBD DIAGNOSE utility. The DBID of the DBD being compared against the Db2 catalog is 'xxxx'. The total number of errors found in this DBD is 'nn'.

System action

DBD checking completed.

Severity

0 (informational)

DSNU915I ***csect-name*** **- OBD X'obid' E-X'xxxxxxxx' R-X'yyyyyyyy'** ***obd-description***

Explanation

This message is used when listing the OBDs in the REPAIR DBD DIAGNOSE utility. The OBID of the OBD being listed is 'obid'. The offset to the OBD within the EXISTING DBD which is displayed later in the output is 'xxxxxxxx'. The offset to the OBD within the REBUILT DBD which is displayed later in the output is 'yyyyyyyy'. A short description of the state of the OBD is 'obd-description'.

System action

DBD checking completed.

Severity

0 (informational)

DSNU916I ***csect-name*** **- OBDS DIFFER AT OFFSET X'xxxxxxxx'** ***field-name*** **- INFORMATION NOT IN DB2 CATALOG**

Explanation

This message indicates the value of a field in the OBD differs from the DBD which exists on the DSNDB01.DBD01 page set and the DBD rebuilt from the Db2 catalog. This is information which is not kept in the Db2 catalog. This is an acceptable difference and does not indicate that the OBD is damaged. The hexadecimal offset from the beginning of the OBD is 'xxxxxxxx'. The name of the field is 'field-name'.

System action

DBD checking continues normally.

Severity

0 (informational)

DSNU917I ***csect-name*** **- DBDS DIFFER AT OFFSET X'xxxxxxxx'** ***field-name*** **- INFORMATION NOT IN DB2 CATALOG**

Explanation

This message indicates that the value of a field in the DBD differs from the DBD which exists on the DSNDB01.DBD01 page set and the DBD rebuilt from the Db2 Catalog. This is information which is not kept in the Db2 catalog. This is an acceptable difference and does not indicate that the DBD is damaged. The hexadecimal offset from the beginning of the DBD is 'xxxxxxxx'. The name of the field is 'field-name'.

System action

DBD checking continues normally.

Severity

0 (informational)

DSNU919I ***csect-name*** **- DBD X'xxxx' OBD X'yyyy' -** ***details***

Explanation

This message gives detailed information about the specified OBD. 'xxxx' is the DBID of the DBD. 'yyyy' is the OBID of the OBD or the PSID of the OBD when the

details indicates a PSID is being processed. *details* provides additional information.

System action

DBD checking continues normally.

Severity

0 (informational)

DSNU920I ***csect-name*** **- OBDS DIFFER AT OFFSET X'xxxxxxxx'** ***field-name***

Explanation

This message indicates that the value of a field in the OBD differs from the DBD which exists on the DSNDB01.DBD01 page set and the DBD rebuilt from the Db2 catalog. The Db2 Catalog and DBD/OBD are inconsistent. The hexadecimal offset from the beginning of the OBD is 'xxxxxxxx'. The name of the field is 'field-name'.

System action

DBD checking continues normally.

Severity

4 (warning)

DSNU921I ***csect-name*** **- OBD X'xxxx' MISSING IN EXISTING DBD**

Explanation

This message indicates that an OBD which was rebuilt from the Db2 catalog does not exist in the DBD which exists on the DSNDB01.DBD01 page set. The Db2 catalog and DBD/OBD are inconsistent. The OBID of the missing OBD is 'xxxx'.

System action

DBD checking continues normally.

Severity

4 (warning)

DSNU922I ***csect-name*** **- OBD X'xxxx' MISSING IN REBUILT DBD**

Explanation

This message indicates that an OBD in the DBD which exists on the DSNDB01.DBD01 page set does not exist in the DBD which was rebuilt from the Db2 catalog. The Db2 catalog and DBD/OBD are inconsistent. The OBID of the missing OBD is 'xxxx'.

System action

DBD checking continues normally.

Severity

4 (warning)

DSNU923I ***csect-name*****-OBDTYPE FOR OBD X'xxxx' DOES NOT MATCH -NO FURTHER CHECKING DONE FOR THIS OBD**

Explanation

The object descriptor (OBD) that exists on the DSNDB01.DBD01 page set is different from the type of OBD that was rebuilt from the Db2 catalog. No further processing can be done because the fields of one OBD type are different from the fields of another. The Db2 catalog and database descriptor (DBD)/OBD are inconsistent. The object identifier (OBID) of the OBD that is inconsistent is 'xxxx'.

System action

Checking for OBD X'xxxx' stops. Checking of the DBD continues normally.

Severity

4 (warning)

DSNU924I ***csect-name*****-DBDS DIFFER AT OFFSET X'xxxxxxxx'** ***field-name***

Explanation

The value of a field in the database descriptor (DBD) differs from the value of the corresponding field in the DBD that exists on the DSNDB01.DBD01 page set and differs from the value of the corresponding field in the DBD that was rebuilt from the Db2 catalog.

xxxxxxxx
The hex offset from the beginning of the DBD.

field-name
The name of the field.

System action

Checking of the DBD continues normally.

Severity

0 (informational)

DSNU925I ***csect-name*****-OBDDFILE AT OFFSET X'xxxxxxxx' IN EXISTING DBD HAS OBID X'nnnn' WHICH IS NOT A FILE OBD**

Explanation

The field that points to the first FILE OBD (OBDDFILE) in the database descriptor (DBD) that exists on the DSNDB01.DBD01 page set does not point to a FILE OBD. The Db2 catalog and DBD/OBD (object descriptor) are inconsistent.

xxxxxxxx
The hex offset from the beginning of the existing DBD.

nnnn
The object identifier (OBID) of the OBD which should be a FILE OBD.

System action

Checking of the DBD continues normally.

Severity

4 (warning)

DSNU926I ***csect-name*-OBDDFILE AT OFFSET X'xxxxxxxx' IN REBUILT DBD HAS OBID X'nnnn' WHICH IS NOT A FILE OBD**

Explanation

The field that points to the first FILE OBD (OBDDFILE) in the database descriptor (DBD) that was rebuilt from the Db2 catalog does not point to a FILE OBD. The Db2 catalog and DBD/OBD (object descriptor) are inconsistent.

xxxxxxxx
The hex offset from the beginning of the rebuilt DBD.

nnnn
The object identifier (OBID) of the OBD that should be a FILE OBD.

System action

Checking of the DBD continues normally.

Severity

4 (warning)

DSNU927I ***csect-name*-OBD X'xxxx' IS A HOLE IN EXISTING DBD**

Explanation

The object descriptor (OBD) that exists on the DSNDB01.DBD01 page set has been logically deleted, OBDHOLE = '1'B. The Db2 catalog and database descriptor (DBD)/OBD are inconsistent. The object identifier (OBID) of the OBD that is a hole is 'xxxx'.

System action

Checking of the DBD continues normally.

Severity

4 (warning)

DSNU928I ***csect-name*-OBD X'xxxx' IS A HOLE IN REBUILT DBD**

Explanation

The object descriptor (OBD) that was rebuilt from the Db2 catalog has been logically deleted, OBDHOLE = '1'B. The Db2 catalog and database descriptor (DBD)/OBD are inconsistent. The object identifier (OBID) of the OBD that is a hole is 'xxxx'.

System action

Checking of the DBD continues normally.

Severity

4 (warning)

DSNU929I ***csect-name*-OBD FIELD *field-name* HAS VALUE OUT OF RANGE AT OFFSET X'xxxxxxxx' IN OBD X'nnnn'**

Explanation

The object descriptor (OBD) field 'field-name' has an unexpected value. The Db2 catalog and database descriptor (DBD)/OBD are inconsistent.

field-name
The name of the field in the OBD.

xxxxxxxx
The hex offset from the beginning of the OBD.

nnnn
The object identifier (OBID) of the OBD.

System action

Checking of the DBD continues normally.

Severity

4 (warning)

DSNU930I ***csect-name*- INDEX *index-name* (OBD X'xxxx') MUST BE REBUILT**

Explanation

The index 'index-name' must be either recovered or dropped and re-created to ensure that the index is consistent with the description in the INDEX FANSET

OBD. The object descriptor (OBD) is not damaged. However, if the index is not either recovered or dropped and re-created, incorrect output can be produced when the index is used as an access path.

index-name
The name of the index found in SYSIBM.SYSINDEXES.

xxxx
The object identifier (OBID) of the OBD.

System action

Checking of the DBD continues normally.

Severity

8 (error)

DSNU931I ***csect-name*** **- OBDDMAX FIELD OF DBD IS TOO LARGE**

Explanation

The OBDDMAX field (maximum number of ID in the DBD) is too large. It is larger than the largest possible number of ID based upon the DBD size.

System action

Checking of the DBD continues but using the largest possible number of ID instead of the incorrect OBDDMAX.

Severity

8

DSNU932I **REPAIR CAN NOT DROP THE DATABASE.**

Explanation

The system cannot drop the database because the name that was specified for the database and the DBID that was specified do not match.

System action

The utility job is halted.

User response

Correct the utility statement, and resubmit the job.

DSNU933I ***csect-name*** **- TABLESPACE** ***tablespace-name*** **MUST BE REORGANIZED**

Explanation

The specified table space was reorganized to materialize pending definition changes. After that REORG job was run, a RECOVER job was run to recover the data to a point in time before the REORG job ran. A subsequent REORG job must be run to complete the point-in-time recovery process.

tablespace-name
The name of the table space.

System action

Utility processing is not initiated.

User response

Run REORG with SHRLEVEL REFERENCE on the entire table space to remove the REORG-pending (REORP) restrictive state, and to complete the point-in-time recovery process.

Severity

8 (error)

Related reference
REORG TABLESPACE (Db2 Utilities)

DSNU935I ***csect-name*** **DATABASE** ***database-name*** **IS NOT STARTED FOR UTILITY PROCESSING ONLY**

Explanation

This message is issued when the REPAIR utility with the DBD option is run on a database that is not started for utility processing only.

System action

REPAIR DBD terminated.

User response

Stop the database. Then start the database with the ACCESS(UT) option. Resubmit the REPAIR DBD job.

Severity

8

DSNU936I ***csect-name*** **DATABASE** ***database-name*** **IS IN USE**

Explanation

This message is issued when the REPAIR utility with the DBD option is run on a database that is in use by others.

System action

REPAIR DBD terminated.

User response

Wait until all users are finished, then resubmit the REPAIR DBD job.

Severity

8

DSNU938I ***csect-name*-OBD X'xxxx' HAD DIFFERENCES WHICH WERE NOT IN A NAMED FIELD**

Explanation

There is a difference between the object descriptor (OBD) in the database descriptor (DBD) that exists on the DSNDB01.DBD01 page set and the DBD that was rebuilt from the Db2 catalog. This difference does not exist in a named field. Therefore, the detailed search by field name fails to find the difference. The Db2 catalog and DBD/OBD are inconsistent. The object identifier (OBID) of the OBD in error is 'xxxx'.

System action

Checking of the DBD continues normally.

Severity

4 (warning)

DSNU939I ***csect-name*-DBD HEADER HAD DIFFERENCES WHICH WERE NOT IN A NAMED FIELD**

Explanation

There is a difference between the DBD header in the DBD that exists on the DSNDB01.DBD01 page set and the DBD that was rebuilt from the Db2 catalog. This difference does not exist in a named field. Therefore, the detailed search by field name fails to find the difference. The Db2 catalog and database descriptor (DBD)/object descriptor (OBD) are inconsistent.

System action

Checking of the DBD continues normally.

Severity

4 (warning)

DSNU971I ***csect-name* TABLESPACE *database-name.tablespace-name* IS CHECK PENDING OR AUX CHECK PENDING CORRELATION-ID *correlation-identifier* CONNECTION-ID *connection-identifier* LUW-ID *luw-identifier***

Explanation

This message is sent to the console when TABLESPACE *tsname* is set to CHECK pending or auxiliary CHECK pending state. The CORRELATION-ID *correlation-identifier* is the correlation identifier of the thread requesting CHECK pending or auxiliary CHECK pending status. Correlation IDs beginning with '0*nn*', where *nn* is a number from 01 to 28, identify system agents. The CONNECTION-ID *connection-identifier* is the correlation identifier of the thread. The LUW-ID *luw-identifier* is the logical-unit-of-work identifier of the thread. If the LUW-ID is an '*', the thread has no LUW-ID. If it is not an '*', the value is a logical-unit-of-work-id that is assigned to the thread followed by an '=' sign and a token value, which can be used in place of logical-unit-of-work-id in any Db2 command that accepts logical-unit-of-work-id as input.

System action

Processing continues.

User response

Resolve the CHECK pending status.

Severity

4 (warning)

Related tasks

Collecting data for failures after a point-in-time recovery (Collecting data)

Adding referential constraints to existing tables (Db2 Administration Guide)

Related reference

Advisory or restrictive states (Db2 Utilities)

CHECK-pending status (Db2 Utilities)

Related information

Recovering from referential constraint violation (Db2 Administration Guide)

DSNU972I ***csect-name* CATALOG UPDATING FAILURE WHILE SETTING OR RESETTING CHECK PENDING CORRELATION-ID *id1* CONNECTION-ID *id2* LUW ID=*luw-id***

Explanation

When the check pending state is set on or off, the updating of the catalog tables (SYSTABLESPACE, SYSTABLES, and SYSTABLEPART) fails. The CORRELATION-ID, *id1*, is the correlation identifier of the thread associated with the application requesting that the check pending state be set on or off. The CONNECTION-ID, *id2*, is the correlation identifier of the application. Correlation IDs beginning with '0nn', where 'nn' is a number from 01 to 28, identify system agents.

System action

Processing continues.

Problem determination

The utility being processed requested the setting of check pending either on or off. The updating of the STATUS column of SYSTABLESPACE, and of the CHECKFLAG and CHECKRID columns of SYSTABLES and SYSTABLEPART failed. Processing continues normally. However, those columns for the rows being updated now contain invalid values. Subsequent utility processing ignores these values, and the next setting or resetting of check pending for that table space corrects the error in one of the following ways:

- If the table space is set to check pending and the catalog fields are in error, the scope of check pending is escalated in the catalog. (The STATUS column of SYSTABLESPACE is set to 'P', and the CHECKFLAG and CHECKRID columns of SYSTABLES and SYSTABLEPART are set to 'C' and binary zeros.)
- If the table space is set to not check pending and the catalog fields are in error, the scope of check pending is set off in the catalog. (The STATUS column of SYSTABLESPACE is set to an 'A', and the CHECKFLAG and CHECKRID columns of SYSTABLES and SYSTABLEPART are set to blanks.)

After the catalog fields are corrected, the setting or resetting of check pending continues as specified.

Usually message DSNT500I or DSNT501I is also issued, because the probable cause of the error is RESOURCE UNAVAILABLE. If the reason for the failure was not RESOURCE UNAVAILABLE, an SVC dump is requested and processing continues normally. To determine the cause of the failure, refer to the dump listing.

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- SYSPRINT output, including JCL, for the application program or batch job, and system messages that were issued. Make sure that MSGLEVEL=(1,1) on the JOB statement so that all diagnostic information is sent to SYSPRINT.

Severity

0 (informational) or 4 (warning)

DSNU973I ***csect-name*** **CHECK PENDING, AUX CHECK PENDING OR BOTH HAS BEEN RESET FOR TABLESPACE** ***database-name.tablespace-name*** **CORRELATION-ID** ***correlation-identifier*** **CONNECTION-ID** ***connection-identifier*** **LUW-ID** ***luw-identifier***

Explanation

This message is sent to the console when CHECK pending, auxiliary CHECK pending or both states were reset for the *tablespace-name* table space. The CORRELATION-ID *correlation-identifier* is the correlation identifier of the thread requesting that the CHECK pending state, the auxiliary CHECK pending state or both states be reset. Correlation IDs beginning with '0nn', where *nn* is a number from 01 to 28, identify system agents. The CONNECTION-ID *connection-identifier* is the correlation identifier of the thread. The LUW-ID *luw-identifier* is the logical-unit-of-work identifier of the thread. If the LUW-ID is an '*', the thread has no LUW-ID. If it is not an '*', the value is a logical-unit-of-work-id that is assigned to the thread followed by an '=' sign and a token value, which can be used in place of the logical-unit-of-work-id in any Db2 command that accepts a logical-unit-of-work-id as input.

System action

Processing continues.

User response

Resolve the CHECK pending status.

Severity

0 (informational)

Related tasks

Collecting data for failures after a point-in-time recovery (Collecting data)

Adding referential constraints to existing tables (Db2 Administration Guide)

Related reference

Advisory or restrictive states (Db2 Utilities)

CHECK-pending status (Db2 Utilities)

Related information

Recovering from referential constraint violation (Db2 Administration Guide)

DSNU993I ***csect-name*** **IMAGE COPY RESTORE TERMINATED**

Explanation

Catalog and directory initialization (image copy restore) did not complete successfully.

System action

Processing terminates.

User response

Examine other error messages associated with this job.

Severity

8 (error)

DSNU994I ***csect-name*** **IMAGE COPY RESTORE COMPLETED SUCCESSFULLY**

Explanation

Catalog and directory initialization (image copy restore) completed successfully.

Severity

0 (informational)

DSNU995I ***csect-name*** **VSAM PUT ERROR,RPLERREG =** ***return-code*****, RPLERRCD =** ***reason-code***

Explanation

VSAM PUT failed with the indicated *return-code* and *reason-code*.

System action

Processing terminates.

System programmer response

Follow standard VSAM diagnostic procedure. Refer to *z/OS DFSMS: Macro Instructions for Data Sets*. See also *MVS/DFP V3R3 Diagnosis Guide* for more information about the VSAM procedures.

User response

Notify system programmer.

Severity

8 (error)

DSNU996I ***csect-name*** **VSAM OPEN ERROR, ACBERRFLG =** ***error-code***

Explanation

VSAM OPEN failed with the indicated ACB *error-code*.

System action

Processing terminates if the error code is greater than or equal to 128; otherwise, processing continues normally.

System programmer response

Follow standard VSAM diagnostic procedure. Refer to *z/OS DFSMS: Macro Instructions for Data Sets*. See also *MVS/DFP V3R3 Diagnosis Guide* for more information about the VSAM procedures.

User response

Notify the system programmer.

Severity

8 (error) if error is greater than or equal to 128; otherwise, 4 (warning)

DSNU997I ***csect-name*** **OUTPUT DATA SET NAME =** ***data-set-name***

Explanation

The indicated *data-set-name* is used for output.

Severity

0 (informational)

DSNU998I ***csect-name*** **INPUT DATA SET NAME =** ***data-set-name***

Explanation

The indicated *data-set-name* is used for input.

Severity

0 (informational)

DSNU999I ***csect-name*** **START OF IMAGE COPYRESTORE FOR JOB** ***job-name step-name***

Explanation

The catalog and directory initialization (image copy restore) started.

Severity

0 (informational)

DSNU1000I ***csect-name*** **- PROCESSING CONTROL STATEMENTS IN PREVIEW MODE**

Explanation

The PREVIEW option has been specified either on the OPTIONS control statement or as a JCL parameter. Control statements will be previewed in this execution for TEMPLATE and LISTDEF use but the utility control statements will not be executed. PREVIEW via JCL parameter will continue to the end of the job step. PREVIEW via OPTIONS PREVIEW will continue until the end of the job step or another OPTIONS control statement.

System action

Utility control statements are previewed but not executed.

User response

If the return code is 8, PREVIEW detected errors which must be corrected. If the return code is 4, PREVIEW detected potential problems, but the previewed statements are valid.

Examine the preview output shown in informational messages DSNU1010I, DSNU1020I, DSNU1021I, DSNU1022I, DSNU1023I and DSNU1025I, plus any error messages. Correct any statements that are in error and remove the PREVIEW option to execute the control statements.

Severity

0 (informational)

DSNU1001I ***csect-name*** **- LISTDEF** ***list-name*** **CLAUSE IDENTIFIES NO NEW OBJECTS:** ***clause-type object-type object-qualifier.object-name***

Explanation

An INCLUDE or EXCLUDE clause of a LISTDEF utility control statement returned no new objects.

csect-name
The name of the control section that issued the message.

list-name
The name of the list.

clause-type
The type of clause: INCLUDE or EXCLUDE.

object-type
The type of object.

object-qualifier.object-name
The name of the object, as a qualified name.

This message is caused by one or more of the following conditions:

- The clause returned no objects.
- The clause returned objects that were already included or excluded by previous clauses.
- The clause returned undefined objects and neither DEFINED NO nor DEFINED ALL is specified.
- The clause returned objects with incomplete definitions. These objects are not included in or excluded from the list, depending on whether the clause is an INCLUDE or EXCLUDE clause.

System action

Utility processing continues.

The total number of objects covered by the LISTDEF did not change as a result of this clause.

User response

No immediate response is required. To prevent this message in the future, update the clause.

To include undefined objects in the list, specify the DEFINED ALL option in the LISTDEF statement.

Severity

4 (warning)

Related tasks

Fixing tables with incomplate definitions (Application programming and SQL)

Related reference

LISTDEF (Db2 Utilities)

DSNU1002I ***csect-name*** **- INVALID KEYWORD SPECIFIED ON CLAUSE:** ***clause-type object-type qualifier.name***

Explanation

An INCLUDE or EXCLUDE clause of a LISTDEF control statement has an invalid keyword specified.

Catalog and directory objects may only be specified via their TABLESPACE or INDEXSPACE names. DATABASE, TABLE and INDEX may not be specified.

Catalog and directory object names may not contain pattern matching characters. They must be included or excluded explicitly using their complete names. Those include or exclude clauses may not contain the keywords RI, BASS, LOB, ALL.

System action

Utility processing stops.

User response

Correct the invalid LISTDEF clause and rerun the utility.

Severity

8 (error)

DSNU1003I ***csect-name*** **- INVALID LIST FOR** ***utility-name*** **UTILITY**

Explanation

The list name referenced on this control statement is not valid for the specified utility. The list either contains no objects or contains objects which cannot be processed by this specific utility.

System action

Utility processing is not initiated.

User response

Correct the LISTDEF in error, and resubmit the utility job.

Severity

8 (error)

Related tasks

Referencing LISTDEF lists in other utility jobs (Db2 Utilities)

Related reference

LISTDEF (Db2 Utilities)

DSNU1004I ***csect-name*** **- DUPLICATE** ***object-type object-name*** **FOUND IN SYSIN** ***dd-name***

Explanation

Duplicate LISTDEF or TEMPLATE statements (duplicate names) were detected in the SYSIN, listdef, or template data set.

System action

Utility processing is not initiated.

User response

Eliminate the duplicate LISTDEF or TEMPLATE names and resubmit the utility job.

Severity

8 (error)

Related tasks

Referencing LISTDEF lists in other utility jobs (Db2 Utilities)

Related reference

LISTDEF (Db2 Utilities)

TEMPLATE (Db2 Utilities)

DSNU1005I ***csect-name*** **- UTILITY** ***name*** **NOT ALLOWED IN** ***dd-type*** **DD** ***dd-name***

Explanation

The utility parser detected a control statement other than TEMPLATE in the SYSTEMPL data set or LISTDEF in the SYSLISTD data set.

System action

Utility processing is not initiated.

User response

Remove the invalid control statements and resubmit the utility job.

Severity

8 (error)

Related tasks

Referencing LISTDEF lists in other utility jobs (Db2 Utilities)

Related reference

LISTDEF (Db2 Utilities)

TEMPLATE (Db2 Utilities)

DSNU1006I ***csect-name - object-type object-name*** **NOT FOUND**

Explanation

A utility control statement used a LIST or TEMPLATE that was not found in SYSIN or either of the SYSTEMPL or SYSLISTD data sets. These DD names may vary if OPTIONS LISTDEFDD or OPTIONS TEMPLATEDD were specified.

System action

Utility processing is not initiated.

User response

Provide the missing LISTDEF or TEMPLATE definition in SYSIN prior to its use and resubmit the utility job. If the definition utility exists in another data set, provide the SYSTEMPL or SYSLISTD DD card for the data set.

Severity

8 (error)

Related tasks

Referencing LISTDEF lists in other utility jobs (Db2 Utilities)

Related reference

LISTDEF (Db2 Utilities)

TEMPLATE (Db2 Utilities)

DSNU1007I ***csect-name*** **- DATE/TIME VALUES MAY CHANGE BEFORE EXECUTION**

Explanation

PREVIEW processing has detected DSN date/time variables on a TEMPLATE control statement being used. These values may change before the actual utility execution, resulting in different data set names.

System action

Preview processing continues normally.

Severity

4 (warning)

DSNU1008I ***csect-name*** **- LISTDEF** ***list-name*** **CONTAINS NO OBJECTS**

Explanation

The indicated LISTDEF list definition expands to contain no objects.

csect-name
The name of the control section that issued the message.

list-name
The name of the list.

Prior to DB2 10, undefined objects were included in the list. However, beginning with DB2 10, undefined objects (objects that have been created with DEFINE NO) are, by default, not included in the list.

System action

Utility processing is not initiated.

User response

Correct the LISTDEF definition, and resubmit the utility job.

To include undefined objects in the list, specify DEFINED ALL on the LISTDEF control statement.

Severity

4 (warning)

Related reference

LISTDEF (Db2 Utilities)

DSNU1009I ***csect-name*** **- TEMPLATE** ***name*** **DSN=** ***dataset-name***

Explanation

PREVIEW processing has expanded a referenced TEMPLATE data set name to the value shown. If the data set name contains date/time variables, the date/time values might change before actual utility execution.

System action

PREVIEW processing continues.

User response

If the data set names shown are not acceptable, correct the TEMPLATE control statements, and resubmit the utility job.

Severity

8 (error)

Related tasks

Referencing LISTDEF lists in other utility jobs (Db2 Utilities)

Related reference

LISTDEF (Db2 Utilities)

TEMPLATE (Db2 Utilities)

DSNU1010I ***csect-name*** **- LISTDEF** ***name*** **EXPANDS TO THE FOLLOWING OBJECTS:**

Explanation

This message is followed by an equivalent LISTDEF control statement with all pattern matching characters removed and all INCLUDE and EXCLUDE clauses evaluated. For static applications, this expanded

LISTDEF may be saved to a data set and reused to avoid list expansion overhead.

System action

PREVIEW processing continues.

User response

Examine the list, correct the LISTDEF if necessary and resubmit the utility job.

Severity

0 (informational)

Related tasks

Referencing LISTDEF lists in other utility jobs (Db2 Utilities)

Related reference

LISTDEF (Db2 Utilities)

DSNU1011I WORKFILE NOT ALLOWED IN LISTDEF

Explanation

A workfile database cannot be used in a LISTDEF list because utilities do not process them.

System action

Utility processing is not initiated.

User response

Correct the LISTDEF in error, and resubmit the utility job.

Severity

8 (error)

Related tasks

Referencing LISTDEF lists in other utility jobs (Db2 Utilities)

Related reference

LISTDEF (Db2 Utilities)

DSNU1012I *csect-name* - LISTDEF MUST BEGIN WITH AN INCLUDE CLAUSE

Explanation

A LISTDEF control statement begins with something other than an INCLUDE clause. The LISTDEF control statement must begin with an INCLUDE clause.

System action

Utility processing is not initiated.

User response

Correct the LISTDEF in error, and resubmit the utility job.

Severity

8 (error)

Related tasks

Referencing LISTDEF lists in other utility jobs (Db2 Utilities)

Related reference

LISTDEF (Db2 Utilities)

DSNU1013I *csect-name* - *dd-type* DD CARD *dd-name* NOT FOUND

Explanation

An OPTIONS control statement specifies a DD name '*dd-name*' that does not exist in the JCL.

System action

Utility processing is not initiated.

User response

Correct the DD name on the OPTIONS statement or include the missing JCL DD card, and resubmit the utility job.

Severity

8 (error)

Related reference

OPTIONS (Db2 Utilities)

DSNU1014I *csect-name* - INDEXSPACE *name* NOT FOUND

Explanation

The specified INDEXSPACE does not exist.

System action

Utility processing is not initiated.

User response

Correct the operand in error, and resubmit the utility job.

Severity

8 (error)

Related concepts

How to include objects in a list (Db2 Utilities)

Db2 online utilities (Db2 Utilities)

Related tasks

Referencing LISTDEF lists in other utility jobs (Db2 Utilities)

Related reference

LISTDEF (Db2 Utilities)

DSNU1015I ***csect-name*** **- ERROR ALLOCATING DATA SET DSN=*name* CODE=X'*reason-code*'**

Explanation

An error was returned by the z/OS DYNALLOC (SVC 99) service when the TEMPLATE utility was attempting to dynamically allocate a data set. This message might be followed by text that explains the indicated reason code.

csect-name
The name of the control section that issued the message.

name
The data set name.

reason-code
One of the following values:

- X'00000000' if specified data set name is a GDG base name
- The DYNALLOC reason code.

System action

Utility processing for the current object halts. If a list is being processed, utility processing of the next object proceeds or halts based on the OPTIONS ITEMERROR control statement. By default, execution halts.

User response

Correct the error that is preventing dynamic allocation, and resubmit the utility job. In some cases, TEMPLATE might not be able to dynamically allocate the data set, and you might need to provide a JCL DD statement for the data set.

Severity

8 (error)

Related reference

Interpreting DYNALLOC return codes (MVS Programming Authorized Assembler Services Reference)

DSNU1016I ***csect-name*** **- TEMPLATE DSN VARIABLE *var-name* HAS NO VALUE**

Explanation

A utility has attempted to build a data set name based on a TEMPLATE that specifies DSN variables. The variable shown has no value in this particular use. For example, PART when the object is not partitioned or ICTYPE when an image copy is not being allocated.

System action

Utility processing for the current object halts. If a list is being processed, utility processing of the next object will proceed or halt based on the OPTIONS ITEMERROR control statement. By default, execution will HALT.

User response

Correct the TEMPLATE DSN specification to eliminate the invalid variable or use a different TEMPLATE, and resubmit the utility job.

Severity

8 (error)

Related concepts

Using the OPTIONS utility with LISTDEF (Db2 Utilities)

Related reference

OPTIONS (Db2 Utilities)

TEMPLATE (Db2 Utilities)

DSNU1017I ***csect-name*** **- TEMPLATE DSN VARIABLE *var-name* TRUNCATED TO *value***

Explanation

While performing dynamic allocation of a TEMPLATE data set the DSN variable shown was truncated to the value shown.

System action

Utility processing continues.

Severity

4 (warning)

DSNU1018I ***csect-name*** **- USER** ***user-id*** **NOT AUTHORIZED TO ACCESS CATALOG TABLE** ***qualifier. name***

Explanation

The user executing the utility does not have the required authority to access the catalog table shown. This access is required to expand the LISTDEF control statement being used.

System action

Utility processing is not initiated.

User response

GRANT the required authority to access the Db2 catalog to the user executing the utility.

Severity

8 (error)

Related reference

LISTDEF (Db2 Utilities)
GRANT (Db2 SQL)
Db2 catalog tables (Db2 SQL)

DSNU1019I ***csect-name*** **- INVALID TEMPLATE NAME** ***template-name***

Explanation

A TEMPLATE control statement specifies an invalid TEMPLATE name. The names UTPRINT, SORTLIB and any name starting with SORTWK or SYS may not be used.

System action

Utility processing terminates.

User response

Correct the TEMPLATE name in error, and resubmit the utility job.

Severity

8 (error)

Related tasks

Referencing LISTDEF lists in other utility jobs (Db2 Utilities)

Related reference

TEMPLATE (Db2 Utilities)
LISTDEF (Db2 Utilities)

DSNU1020I ***csect-name*** **- EXPANDING LISTDEF** ***list-name***

Explanation

PREVIEW processing is performing the catalog lookup necessary to expand the specified LISTDEF.

System action

PREVIEW processing continues.

Severity

0 (informational)

DSNU1021I ***csect-name*** **- PROCESSING** ***clause-type*** **CLAUSE** ***object-type qualifier.name***

Explanation

PREVIEW processing is expanding the specified clause of a LISTDEF. A DSNU1022I message follows this message to indicate how many objects are identified by each INCLUDE or EXCLUDE clause and message DSNU1023I to show the final expanded list..

System action

PREVIEW processing continues.

Severity

0 (informational)

DSNU1022I ***csect-name*** **- CLAUSE IDENTIFIES** ***n*** **OBJECTS**

Explanation

PREVIEW processing has expanded one INCLUDE or EXCLUDE clause of a LISTDEF control statement. The clause expanded to the indicated *n* number of objects. The sum of the values shown on the DSNU1022I messages may not match the quantity shown on DSNU1023I due to INCLUDEs, EXCLUDEs and list overlap.

System action

PREVIEW processing continues.

Severity

0 (informational)

DSNU1023I ***csect-name*** **- LISTDEF** ***name*** **CONTAINS** ***n*** **OBJECTS**

Explanation

PREVIEW processing has finished expanding a LISTDEF. The final list contains the indicated number of objects. The value shown may not match the sum of previous DSNU1022I quantities due to INCLUDEs, EXCLUDEs and list overlap.

System action

PREVIEW processing continues.

Severity

0 (informational)

DSNU1024I ***csect-name*** **- OPTIONS EVENT WARNING HAS SET RETURN CODE TO** ***return-code***

Explanation

Utility processing has ended with WARNING messages and a return code of 4. However, due to a previous OPTIONS EVENT WARNING control statement, the return code has been changed to the indicated return code.

System action

Utility processing halts if WARNING RC8 was specified, or continues if WARNING RC0 was specified.

User response

Use OPTIONS WARNING RC0 only on repetitive utility executions where WARNING messages are expected and acceptable.

Severity

0 (informational) or 8 (warning)

DSNU1025I ***csect-name*** **-** ***name*** **IS A DD NAME**

Explanation

PREVIEW processing has checked the current utility control statement for TEMPLATE dynamic allocation and has found the specified name refers to a JCL DD card, not a template. In all cases the presence of a DD card takes precedent over any TEMPLATE of the same name.

System action

PREVIEW processing continues.

User response

If a TEMPLATE and DD card have the same name, the DD card always takes precedence. If the indicated name should not reference a DD card, perform one of the following actions:

- Remove the DD card
- Change the TEMPLATE name on the TEMPLATE control statement and the utility control statement that refers to it

If the reference to the DD card is correct, no action is necessary.

Severity

0 (informational)

Related reference

TEMPLATE (Db2 Utilities)

DSNU1026I ***csect-name*** **- LIST** ***using-list*** **REUSES LIST** ***used-list***

Explanation

A LISTDEF list is INCLUDING or EXCLUDING another list that has already been used in expansion of this clause. This "circular reference" is not allowed. For example, the following specification is not allowed:
```
LISTDEF A INCLUDE LIST B LISTDEF B
INCLUDE LIST A
```

System action

Utility processing does not initiate.

User response

Correct one or more LISTDEF control statements to eliminate the circular reference and resubmit the utility job.

Severity

8 (error)

Related tasks

Referencing LISTDEF lists in other utility jobs (Db2 Utilities)

Related reference

LISTDEF (Db2 Utilities)

DSNU1027I ***csect-name*** **- PROCESSING CONTINUES DUE TO OPTIONS ITEMERROR SKIP**

Explanation

An error has occurred during utility processing, as indicated by previous error messages. However, because an OPTIONS ITEMERROR SKIP control statement is in force, processing continues despite the error.

csect-name
The name of the control section that issued the message.

System action

Message DSNU1027I is issued with a severity level that describes at what point in processing the condition occurred.

Severity 4
The list is being expanded, and processing of items in the list has not started. Utility processing continues on the current utility control statement and continues on to the next utility control statement in the job step.

Severity 8
Processing of items in the list has started. Utility processing continues on the current utility control statement. Subsequent utility control statements in the same job step are not processed.

Subsequent error conditions might prevent utility processing from completing.

User response

Take the action indicated by the severity level associated with the message.

Severity 4
In most cases, no action is required.

Severity 8
In most cases, correct the previous error, and resubmit the utility for the objects in error. Then resubmit the utility control statements that follow the control statement that ended with return code 8.

If the utility experiencing an error is QUIESCE LIST and a single quiesce point is required for the entire list, you must resubmit the entire list.

Severity

4 (warning) or 8 (error)

Related concepts
Db2 online utilities (Db2 Utilities)

DSNU1028I ***csect-name*** **- INVALID KEYWORD** ***invalid-keyword*** **FOR DASD TEMPLATE**

Explanation

A DASD TEMPLATE control statement cannot include the tape TEMPLATE keyword *invalid-keyword*.

System action

Utility processing does not initiate.

User response

Db2 uses the UNIT operand to determine the data set type. Either remove the tape keyword from the TEMPLATE control statement, or correct the UNIT operand to refer to a tape unit.

Severity

8 (error)

Related concepts
Copies of lists of objects (Db2 Utilities)
Related tasks
Referencing LISTDEF lists in other utility jobs (Db2 Utilities)
Related reference
LISTDEF (Db2 Utilities)
TEMPLATE (Db2 Utilities)
Syntax and options of the TEMPLATE control statement (Db2 Utilities)

DSNU1029I ***csect-name*** **- INVALID KEYWORD** ***invalid-keyword*** **FOR TAPE TEMPLATE**

Explanation

A tape TEMPLATE control statement cannot include the DASD TEMPLATE keyword *invalid-keyword*.

System action

Utility processing does not initiate.

User response

Db2 uses the UNIT operand to determine the data set type. Either remove the DASD keyword from the TEMPLATE control statement, or correct the UNIT operand to refer to a DASD unit.

Severity

8 (error)

Related concepts
Copies of lists of objects (Db2 Utilities)

Related tasks

Referencing LISTDEF lists in other utility jobs (Db2 Utilities)

Related reference

LISTDEF (Db2 Utilities)

TEMPLATE (Db2 Utilities)

Syntax and options of the TEMPLATE control statement (Db2 Utilities)

DSNU1030I ***csect-name*** **- QUALIFIER** ***invalid-qualifier*** **TOO LONG**

Explanation

The TEMPLATE DSN qualifier '*invalid-qualifier*' is greater than eight characters.

System action

Utility processing for the current object halts. If a list is being processed, utility processing of the next object will proceed or halt based on the OPTIONS ITEMERROR control statement. By default execution will HALT.

User response

Correct the TEMPLATE DSN expression and resubmit the utility job.

Severity

8 (error)

Related tasks

Referencing LISTDEF lists in other utility jobs (Db2 Utilities)

Related reference

OPTIONS (Db2 Utilities)

TEMPLATE (Db2 Utilities)

DSNU1031I ***csect-name*** **- DSN** ***name*** **TOO LONG**

Explanation

The DSN operand in the TEMPLATE utility control statement results in a data set name that is too long for the type of data set that is being allocated.

csect-name
The name of the control section that issued the message.

name
The data set name.

System action

Utility processing for the current object halts. If a list is being processed, utility processing of the next object proceeds or halts based on the ITEMERROR specification in the OPTIONS control statement. By default, execution halts.

User response

Correct the TEMPLATE DSN operand in error, and resubmit the utility job.

Severity

8 (error)

Related tasks

Referencing LISTDEF lists in other utility jobs (Db2 Utilities)

Related reference

OPTIONS (Db2 Utilities)

TEMPLATE (Db2 Utilities)

DSNU1032I ***csect-name*** **- INVALID QUALIFIER** ***qualifier*** **IN TEMPLATE** ***name***

Explanation

The TEMPLATE DSN qualifier either contains invalid characters or does not start with an alpha character.

System action

Utility processing for the current object halts. If a list is being processed, utility processing of the next object will proceed or halt based on the OPTIONS ITEMERROR control statement. By default, execution will HALT.

User response

Correct the TEMPLATE DSN operand in error, and resubmit the utility job. Common causes of this error message are:

- Omission of the trailing period from a TEMPLATE DSN variable name. All TEMPLATE DSN variable names are of the form `&xyz.` and must contain the trailing period.
- Invalid use of a partitioned data set.

Severity

8 (error)

Related concepts

Db2 online utilities (Db2 Utilities)

Db2 stand-alone utilities (Db2 Utilities)

Related reference

Syntax and options of the TEMPLATE control statement (Db2 Utilities)

DSNU1033I ***csect-name*** **- PROCESSING LIST ITEM:** ***object-type qualifier.name***

Explanation

While processing a LISTDEF list, utility processing has begun on the indicated object.

System action

Utility processing continues.

Severity

0 (informational)

DSNU1034I ***csect-name*** **-** ***primary-secondary*** **SPACE** ***units quantity*** **TOO LARGE FOR DATA SET** ***name***

Explanation

The TEMPLATE PRIMARY or SECONDARY SPACE quantity indicated is too large. It is not possible to dynamically allocate a data set larger than 16 777 215 units.

System action

Utility processing for the current object halts. If a list is being processed, utility processing of the next object will proceed or halt based on the OPTIONS ITEMERROR control statement. By default, execution will HALT.

User response

The Db2-calculated required space is too large to be dynamically allocated in the units shown. If the primary allocation is too large, use the PCTPRIME keyword to reduce the primary and increase the secondary. If the secondary allocation is too large, use the NBRSECND keyword to increase the number of secondary allocations. It is not possible to use TEMPLATE dynamic allocation for data sets larger than 16×(16 777 215) MB. If an object requires a data set of this size it must be processed individually using a DD card, not a template.

Severity

8 (error)

DSNU1035I ***csect-name*** **-** ***statement-type*** **STATEMENT PROCESSED SUCCESSFULLY**

Explanation

Db2 issues this message following the successful execution of an OPTIONS, LISTDEF, or TEMPLATE utility control statement.

System action

Db2 processed and retained the options or definitions specified on the control statement for use on subsequent utility control statements.

Severity

0 (informational)

DSNU1036I ***csect-name*** **- UNABLE TO ESTIMATE SPACE REQUIREMENTS FOR** ***dataset-use***

Explanation

While processing a TEMPLATE utility statement that does not include the SPACE option, Db2 could not calculate the default data set size. Db2 bases default calculations on the size of existing data sets. In this situation, Db2 could not determine the size of existing data sets, because at least one of those existing data sets is one of the following types:

- an in-stream data set
- a member of a partitioned data set
- a data set that resides on tape
- a result set that was generated by a DECLARE CURSOR statement that was executed by the EXEC SQL utility.

dataset-use
The data set that caused the error. *dataset-use* can be either a DD name, such as SYSREC, or a utility option, such as INDDN, that identifies the data set or template.

System action

Db2 halts utility processing for the current object. If the utility is processing a list of objects, utility processing of the next object proceeds or halts based on the OPTIONS ITEMERROR statement. By default, processing halts.

User response

Add the SPACE option to the TEMPLATE statement in error and rerun the utility. If the utility is the LOAD utility, you must add the SPACE option to all TEMPLATE statements referenced in the LOAD statement, except for the input data set.

Severity

8 (error)

DSNU1037I ***csect-name*** **- PREVIEW PROCESSING CONTINUES DUE TO JCL PARAMETER**

Explanation

An OPTIONS utility control statement has attempted to turn off PREVIEW processing. PREVIEW processing continues because the PREVIEW JCL parameter has been specified. This parameter applies to the entire job step and can not be overridden by an OPTIONS control statement.

System action

Utility processing continues in PREVIEW mode.

User response

If PREVIEW processing must be turned off in the middle of a utility job step, remove the PREVIEW JCL parameter. Activate or deactivate PREVIEW processing by using the OPTIONS utility control statement, not the PREVIEW JCL parameter.

Severity

0 (informational)

DSNU1038I ***csect-name*** **- DATASET ALLOCATED. TEMPLATE=*template-name* DDNAME=*dd-name* FILE SEQUENCE=*file-sequence* DSN=*ds-name***

Explanation

The specified data set was successfully allocated based on a template.

csect-name
The name of the control section that issued the message.

template-name
The name of the template as defined by the TEMPLATE utility control statement.

dd-name
The DD name.

file-sequence
The file sequence number. This value is shown only for tape data sets.

ds-name
The name of the data set.

System action

Processing continues.

User response

No action is required.

Severity

0 (informational)

Related reference
TEMPLATE (Db2 Utilities)

DSNU1039I ***csect-name*** **- PROCESSING LIST ITEM: *object-type qualifier.name* PARTITION *partnum***

Explanation

While processing a LISTDEF list, utility processing has begun on the indicated object.

System action

Utility processing continues.

Severity

0 (informational)

DSNU1040I ***csect-name*** **- UNABLE TO LOCATE DSN *dsname* ON RESTART**

Explanation

Db2 could not find data set *dsname* when the utility was restarted. The data set is required for restart to continue.

System action

The utility step abends. The utility job step is in the stopped state.

User response

Refer to the Db2 abend code x'00E400C3' for more information.

DSNU1041I ***csect-name*** **- UNABLE TO CREATE GDG BASE *name reason***

Explanation

A TEMPLATE could not allocate a generation data group (GDG) data set, but the base GDG did not exist. The utility was unable to define the GDG base.

System action

Utility processing halts for the current object. If a list is in process, utility processing of the next object will proceed or halt based on the OPTIONS ITEMERROR control statement. By default, execution will HALT.

User response

Review the reason value to determine why the GDG base could not be defined. The possible reasons and suggested responses include:

- UNABLE TO LOAD IDCAMS PROGRAM. Ensure that the utility can invoke the IDCAMS program. Ensure that the utility can invoke the IDCAMS program.
- IDCAMS ABEND *xxx*. Use *xxx*, the abend code from the IDCAMS program, to determine why the IDCAMS program abended.
- ERROR IN IDCAMS. Review the IDCAMS message output that is listed between messages DSNU1042I and DSNU1043I to determine why the GDG base could not be defined.

Severity

8 (error)

DSNU1042I ***csect-name*** **- START OF IDCAMS MESSAGES**

Explanation

This message indicates the beginning of the IDCAMS messages or other related non-Db2 messages. DSNU1043I indicates the end.

User response

No action is required, but subsequent IDCAMS messages may require some action. See the *z/OS MVS System Messages Volumes 1-10* or other appropriate documentation for more information.

DSNU1043I ***csect-name*** **- END OF IDCAMS MESSAGES**

Explanation

This message indicates the end of the IDCAMS or other related non-Db2 messages. DSNU1042I indicates the beginning.

User response

No action is required, but preceding messages may require some action. See the *z/OS MVS System Messages Volumes 1-10* for more information.

DSNU1044I ***csect-name*** **- PROCESSING** ***ddname*** **AS EBCDIC**

Explanation

The utility control statement input data set begins with an EBCDIC character and is assumed for the duration of this job step to contain only EBCDIC characters.

System action

Processing of EBCDIC utility control statements continues.

User response

If processing of utility control statements as EBCDIC is incorrect make sure the first character in the input data set is UNICODE, specifically UTF-8 CCSID 1208. This will cause the entire input data set to be processed as UNICODE.

Severity

0 (informational)

DSNU1045I ***csect-name*** **- PROCESSING** ***ddname*** **AS UNICODE**

Explanation

The utility control statement input data set begins with a UNICODE character, specifically UTF-8 CCSID 1208, and is assumed for the duration of this job step to contain only UNICODE characters.

System action

Processing of UNICODE utility control statements continues.

Attention: UTF-8 quoted strings may not print correctly in utility error messages. All messages are printed in EBCDIC, and the quoted strings remain in UTF-8, causing the output to display poorly in EBCDIC.

User response

If processing of utility control statements as UNICODE is incorrect make sure the first character in the input data set is EBCDIC. This will cause the entire input data set to be processed as EBCDIC.

Severity

0 (informational)

DSNU1046I ***csect-name*** **- SWITCH-TO-TEMPLATE** ***template-name*** **NOT FOUND**

Explanation

The LIMIT option of a TEMPLATE utility control statement refers to a switch-to-template name that was not found in SYSIN or SYSTEMP data set.

System action

Utility processing continues with original template.

User response

Provide the missing TEMPLATE definition in SYSIN prior to its use and resubmit the utility job. If the TEMPLATE definition exists in another data set, provide the SYSTEMPL DD card for the data set.

Severity

4 (warning)

Related reference

TEMPLATE (Db2 Utilities)

DSNU1047I ***csect-name*** **- PROCESSING SKIPPED FOR** ***object-type object-name*** **REASON CODE=*code***

Explanation

The utility has skipped processing of the indicated object. The reason code shown indicates why processing was skipped.

1 - CLONE was specified and this object has no CLONE.

2 - This object was created with DEFINE NO and this utility does not process DEFINE NO objects.

System action

Processing continues for the remaining objects.

Severity

0 (informational)

DSNU1048I ***csect-name*** **- PROCESSING SKIPPED FOR *n* OF *m* OBJECTS**

Explanation

This message summarizes DSNU1047I messages issued earlier during the execution of this utility control statement. It indicates how many objects were skipped for the list being processed.

System action

Processing continues for the remaining objects.

Severity

0 (informational)

DSNU1049I ***csect-name*** **- THE** ***utility-name*** **UTILITY WAS NOT INVOKED. THERE WERE NO OBJECTS TO BE PROCESSED IN LISTDEF** ***list-name*****.**

Explanation

A utility detected an empty LISTDEF list. The utility that was processing the indicated list was not invoked.

csect-name
The name of the control section that issued the message.

list-name
The name of the list.

utility-name
The name of the utility.

System action

The utility job ends with return code 4.

User response

If the empty LISTDEF list will always be empty, modify the LISTDEF parameters to eliminate the warning message. See the previous DSNU1008 message and other accompanying messages to determine why the LISTDEF is empty.

A common cause of this warning message is the LISTDEF DEFINED keyword default value of YES. If all objects in the list are undefined, an empty list is the result. Specify DEFINED ALL or DEFINED NO on the LISTDEF statement if undefined objects need to be processed.

Severity

4 (warning)

Related reference

LISTDEF (Db2 Utilities)

Syntax and options of the LISTDEF control statement (Db2 Utilities)

Related information

DSNU1008I

csect-name - LISTDEF *list-name* CONTAINS NO OBJECTS

DSNU1050I ***csect-name*** **- INVALID SUBSTRING NOTATION IN EXPRESSION** ***string*** **ON TEMPLATE** ***template name***

Explanation

Invalid substring notation was detected on the TEMPLATE DSN operand. The portion of the DSN operand which is in error and the TEMPLATE name on which it occurred are shown.

System action

Utility processing is terminated.

User response

Correct the TEMPLATE control statement which is in error. Common causes of this error are incorrect syntax of the (s,l) clause and values of "s" or "l" which fall outside of the variable value at the time of execution.

Severity

8 (error)

DSNU1051I ***csect-name*** **TEMPLATE SUBSYS IS NOT SUPPORTED TO ALLOCATE FILE FOR** ***util-name*** **UTILITY**

Explanation

Dynamically allocating a BatchPipes® or z/OS UNIX System Services file is not supported for *util-name* UTILITY.

User response

In the TEMPLATE utility control statement, remove the SUBSYS or PATH keyword and resubmit the job.

Severity

8 (error)

DSNU1052I ***csect-name util-name*** **UTILITY DOES NOT SUPPORT RESTART WHEN TEMPLATE SUBSYS IS USED**

Explanation

The utility that uses the BatchPipes or z/OS UNIX System Services file cannot be restarted.

User response

Use the Db2 command TERM UTILITY to terminate the stopped utility, and then rerun the job.

Severity

8 (error)

DSNU1053I ***csect-name*** **KEYWORD** ***k1*** **INVALID WITH KEYWORD** ***k2*** **ON** ***utility-name***

Explanation

The use of KEYWORD *k1* is not allowed due to a conflicting keyword *k2* on another utility control statement. The conflicting LISTDEF or TEMPLATE name is shown.

User response

Correct one or both control statements in error and resubmit the job.

Severity

8 (error)

DSNU1054I **PARTITIONS of** ***object-type object-name*** **ARE NOT ALL IN THE SAME RBALRSN PAGE FORMAT. KEYWORD** ***keyword-name*** **REQUIRES KEYWORD PARTLEVEL.**

Explanation

The BASIC and EXTENDED keywords can be used on an entire partitioned object only when all partitions of that object are in the same format. Partitions of the indicated object exist in both BASIC and EXTENDED format.

object-type
The type of object.

object-name
The name of the object.

keyword-name
The name of the keyword.

System action

Processing terminates.

User response

Either remove the indicated keyword, or add the PARTLEVEL keyword.

Severity

8 (error)

Related reference
LISTDEF (Db2 Utilities)

DSNU1055I **KEYWORD** ***keyword-name*** **IGNORED FOR ONE OR MORE 'DEFINE NO' OBJECTS**

Explanation

The indicated keyword cannot be evaluated for DEFINE NO objects. The keyword is ignored and the requested filtering is not performed for the DEFINE NO objects. The keywords remain part of the resulting LISTDEF INCLUDE or EXCLUDE result.

keyword-name
The name of the keyword.

System action

Processing continues.

User response

No action is required.

Severity

0 (informational)

Related reference
LISTDEF (Db2 Utilities)

DSNU1059I ***csect-name - object-count* OBJECTS EXCEEDS THE MAXIMUM NUMBER OF OBJECTS *maximum-supported* ALLOWED FOR THE *utility-name* UTILITY**

Explanation

The number of objects included by LISTDEF exceeds the maximum number supported for the *utility-name* utility. Partitions of table spaces or index spaces included by the PARTLEVEL keyword are counted as separate objects.

csect-name
The name of the control section that issued the message.

object-count
The number of objects included by LISTDEF.

objects-supported
The maximum number of objects supported by the *utility-name* utility.

utility-name
The name of the utility.

System action

The *utility-name* utility is not invoked.

User response

Change the LISTDEF utility control statement to include fewer objects in the list and resubmit the job.

Problem determination:

Severity

8 (error)

DSNU1060I ***csect-name - additional-information***

Explanation

The REPAIR utility completed and provided additional information about missing system pages and mismatched version numbers.

csect-name
The name of the control section that issued the message.

additional-information
Additional information about the mismatch. Possible values are:

REPAIR INSERTVERSIONPAGES COMPLETED. VERSION PAGES WERE INSERTED.
REPAIR INSERTVERSIONPAGES completed, and one or more missing system pages were inserted.

REPAIR INSERTVERSIONPAGES COMPLETED. NO VERSION PAGES NEED TO BE INSERTED.
REPAIR INSERTVERSIONPAGES completed. No version zero system page is required to be inserted for any table in the table space.

TABLES VERSION INFORMATION WERE UPDATED. RUN THE REORG AND MODIFY UTILITIES TO MATERIALIZE THE CHANGES.
REPAIR INSERTVERSIONPAGES SETCURRENTVERSION inserted missing system pages and increased version numbers for tables at version 0 to the current version of the table space. A REORG and a subsequent MODIFY are recommended after this operation.

System action

The REPAIR INSERTVERSIONPAGES job completed without error.

User response

If *additional-information* recommends that you do so, run REORG on the object to materialize the version number for all data rows so that they are at the current version. To delete older image copies that have lower version numbers, run the MODIFY utility.

DSNU1100I ***csect-name* RECORD '*n*' FOR PARTITION *m* WILL BE DISCARDED DUE TO *field-name* CONVERSION ERROR FOR *table-name* ERROR CODE *cc***

Explanation

The load utility found the input data provided for a field to be incorrect. The corresponding input data set record 'n' from the input data set specified for partition *m* will be placed in the DISCARDS data set.

The error code, *cc*, identifies the problem. See DSNU334I for the list of error codes and their meaning.

System action

The input data set record is noted and will be discarded in the DISCARD phase. The LOAD utility continues to process additional records in the input data set.

User response

Following the completion of the current LOAD utility invocation, examine the record in the DISCARDS data set for partition *m*. Correct the error in the discarded input data. Submit a RESUME(YES) LOAD invocation with the DISCARDS data set as the input data set.

Severity

4 (warning)

Related reference

Syntax and options of the LOAD control statement (Db2 Utilities)

Related information

DSNU334I

csect-name INPUT FIELD *field-name* INVALID FOR *table-name*, ERROR CODE *error-code*

DSNU1101I ***csect-name* RECORD 'n' FOR PARTITION *m* WILL BE DISCARDED DUE TO INVALID *field-name* COLUMN SPECIFICATION**

Explanation

The load utility calculated the location of an input data value using the field specifications supplied and VARCHAR length fields present within the input data set record. The calculated position for the field was determined to be incorrect.

System action

The input data set record number is noted and will be discarded in the DISCARD phase. The LOAD utility continues to process additional records in the input data set.

User response

Following the completion of the current LOAD utility invocation, examine the record in the DISCARDS data set for partition *m*. Correct the error in the discarded input data, if one exists. Otherwise, correct the input field specification. Submit a RESUME(YES) LOAD invocation, which uses the DISCARDS data set and the verified LOAD utility statement and field specifications.

Severity

4 (warning)

Related reference

Syntax and options of the LOAD control statement (Db2 Utilities)

DSNU1102I ***csect-name* RECORD 'n' FOR PARTITION *m* WILL BE DISCARDED DUE TO ERROR = X'reason-code' FROM EXIT ROUTINE *procedure-name* FOR *table-name***

Explanation

The exit routine provided by your installation blocked the load of record 'n' for partition *m* into the table indicated. The reason-code was set by the exit routine.

System action

The input data set record number is noted and will be discarded in the DISCARD phase. The record in error is placed in the DISCARDS data set. The LOAD utility continues to process additional records in the input data set.

System programmer response

Verify that the validation routine is correct.

User response

Following the completion of the current LOAD utility invocation, examine the record in the DISCARDS data set for partition *m*. Correct the error in the discarded input data, if one exists. Ensure that the exit routine provided is correct. Submit a RESUME(YES) LOAD invocation, which uses the DISCARDS data set and the verified LOAD utility statement and field specifications.

Severity

4 (warning)

Related reference

Syntax and options of the LOAD control statement (Db2 Utilities)

DSNU1103I ***csect-name*** **RECORD '*record-num*' FOR PARTITION *part-num* WILL BE DISCARDED DUE TO PART OR HIGH KEY VALUESPECIFICATION(S)**

Explanation

The discarded record does not belong to the partition *part-num* being loaded. For a LARGE table space, this might be because the key is higher than the high key value specified for the last partition.

System action

The input data set record number is noted and will be discarded in the DISCARD phase. The LOAD utility continues to process additional records in the input data set.

System programmer response

Verify that the validation routine is correct.

User response

Following the completion of the current LOAD utility invocation, examine the record in the DISCARDS data set for partition *m*. Correct the error in the discarded input data, if one exists. Submit a RESUME(YES) LOAD invocation with the DISCARDS data set as the input data set.

Severity

4 (warning)

Related reference

LOAD (Db2 Utilities)

Syntax and options of the LOAD control statement (Db2 Utilities)

DSNU1104I ***csect-name*** **RECORD 'n' FOR PARTITION *m* WILL BE DISCARDED DUE TO WHEN SPECIFICATION(S)**

Explanation

The discarded record does not satisfy the WHEN selection expression provided for partition *m*.

System action

The input data set record is noted and will be discarded in the DISCARD phase. The LOAD utility continues to process additional records in the input data set.

User response

Following the completion of the current LOAD utility invocation, examine the record in the DISCARDS data set for partition *m*. Correct the error in the discarded input data, if one exists. Submit a RESUME(YES) LOAD invocation with the DISCARDS data set as the input data set. If FORMAT UNLOAD was specified on the load statement, the WHEN specifications are built internally. This ensures that the rows are loaded back into the same object from which they were unloaded.

Severity

4 (warning)

Related reference

Syntax and options of the LOAD control statement (Db2 Utilities)

DSNU1105I ***csect-name*** **RECORD '*n*' FOR PARTITION *m* WILL BE DISCARDED DUE TO UNEXPECTED ERROR**

Explanation

The LOAD of input data set record number '*n*' for partition *m* was attempted but was not successful due to an unexpected error.

System action

If the error was caused because a resource was not available, a DSNT500I message will be issued.

The utility step will be abended with a system X'04E' and an abend reason code of '00E40318'. If a DSNT500I message is not issued, an SVC dump will be requested. A SYSABEND dump of batch storage is also requested.

Operator response

An operator with SYSOPR authority can issue a TERM UTIL to free any held resources if that is necessary.

System programmer response

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

User response

If a DSNT500I message was issued, refer to the description under that message number. If the unavailable resource becomes available, the utility step is restartable.

If there is no DSNT500I message, the error is an unexpected internal error and you should consult your system programmer.

Severity

8 (error)

Related reference

-TERM UTILITY (Db2) (Db2 Commands)

Related information

DSNT500I

csect-name RESOURCE UNAVAILABLE REASON *reason-code* TYPE *resource-type* NAME *resource-name*

00E40318 (Db2 Codes)

DSNU1106I ***csect-name* RECORD '*n*' FOR PARTITION *m* WILL BE DISCARDED DUE TO INVALID *field-name* COLUMN SPECIFICATION FOR *table-name***

Explanation

The load utility calculated the location of an input data value using the field specifications supplied and VARCHAR length fields present within the input data set record 'n' for partition *m*. The calculated position for the field was determined to be incorrect.

System action

The input data set record number is noted and will be discarded in the DISCARD phase. The LOAD utility continues to process additional records in the input data set.

User response

Following the completion of the current LOAD utility invocation, examine the record in the DISCARDS data set for partition *m*. Correct the error in the discarded input data, if one exists. Otherwise, correct the input field specification. Submit a RESUME(YES) LOAD invocation, which uses the DISCARDS data set and the verified LOAD utility statement and field specifications.

Severity

4 (warning)

Related reference

Syntax and options of the LOAD control statement (Db2 Utilities)

DSNU1107I ***csect-name* - UNIQUE INDEX KEY DUPLICATES KEY OF INDEXED ROW AT RID *record-id* INDEX = *index-name* TABLE = *table-name* RECNO = *record-number* FOR PART = *partition* RID = *duplicate-id***

Explanation

A duplicate key or duplicate hash key was identified during a parallel LOAD operation. The indicated input data set record was loaded into a table partition, but it duplicates either a hash key or the key value of an existing record, which causes a unique index violation.

csect-name
The name of the control section that issued the message.

record-id
The record ID where the input data set was loaded.

index-name
The name of the index.

table-name
The name of the table.

record-number
The number for the record in the input data set to load.

duplicate-id
The record ID of the duplicate key value.

System action

Processing continues.

No index entry is created for the record at RID *duplicate-id*. The record will be deleted in a subsequent phase of processing.

User response

No action is required.

Severity

4 (warning)

DSNU1108I ***csect-name* UNIQUE INDEX KEY DUPLICATES KEY FROM INPUT DATASET RECORD *iiii* FOR PART *m* LOADED AT RID *rrrr* INDEX = *index-name* TABLE = *table-name* RECNO = *recno* RID = *duprid***

Explanation

Input data set record 'recno' was loaded into table 'table-name', partition *m*, at RID 'duprid', but it causes a unique index violation for index 'index-name'. It duplicates the key value of another record in the load job: the record loaded at RID 'rrrr' from input data set record 'iiii'.

System action

Processing continues. Index entries are not created for either record. Both records will be deleted in a subsequent phase of processing.

Severity

4 (warning)

DSNU1109I ***csect-name*** **RECORD '*n*' FOR PARTITION *m* WILL BE DISCARDED DUE TO CHECK CONSTRAINT *constraint-name* VIOLATION ON TABLE *table-name***

Explanation

The discarded record violates the check constraint named *constraint-name* defined on table *table-name*. The record is not loaded and is discarded during the DISCARD phase.

System action

The LOAD utility continues to process additional records in the input data set.

User response

After the LOAD utility completes, examine the record in the DISCARDS data set for partition *m*. Correct the error in the discarded input data. Submit a RESUME(YES) LOAD job with the DISCARDS data set as the input data set.

Severity

4 (warning)

DSNU1110I ***csect-name*** **RECORD '*n*' FOR PARTITION *m* VIOLATES CHECK CONSTRAINT *constraint-name* ON TABLE *table-name***

Explanation

The LOAD utility cannot load record *n* into table *table-name* partition *m* because the check constraint *constraint-name* would be violated. The record is not loaded.

System action

Processing terminates. An abend is requested so that the LOAD can be restarted after the error condition is corrected.

User response

Find the failing record in the input data set for partition *m*, correct the condition that caused the check constraint to be violated, and restart the LOAD utility.

Severity

8 (error)

DSNU1111I ***csect-name*** **FOREIGN KEY HAS NO PRIMARY KEY FOR RELATIONSHIP=*r1* INPUT RECORD NUMBER=*nnnn*, PART *m*, RID=X'rrrr'**

Explanation

Input record 'nnnn' for partition *m* caused a row to be loaded into table 'table' at RID 'rrrr' with no primary key for the relationship with the name 'r1'.

System action

Processing continues.

User response

None required. The constraint violation described will be rectified later in processing.

Severity

4 (warning)

DSNU1112I ***csect-name*** **DISCARD PHASE STATISTICS - *nnn* INPUT DATA SET RECORDS DISCARDED FOR PARTITION *m***

Explanation

Input data set records were rejected by the LOAD utility for one or several reasons. The rejected records have been placed in a discards data set. The number of records rejected for partition *m* is 'nnn'. Message DSNU399I summarizes the errors causing the records to be rejected.

System action

Processing continues.

User response

Examine the LOAD error summary and decide which of the discarded records, if any, should be corrected and reapplied to the table space.

Severity

4 (warning)

DSNU1113I ***csect-name*** **- LOAD UTILITY ERROR SUMMARY REPORT**

Explanation

This message summarizes errors detected during the load job. A report is issued only if unique index or referential constraint violations were detected. The report contains one line for each error. The errors are listed first by error severity and within that by *idsrn*.

The report fields have the following meanings:

sev

The severity of the error reported on this line:

Severity	Type of error	Explanation
1	Primary	Primary referential integrity errors and all nonreferential integrity errors.
2	Secondary	Secondary referential integrity errors (that is, errors that result from a primary referential integrity error in an ancestor).

idsrn

The relative record number in the input data set, for the partition identified by *pno*, of the record causing the error reported on this line.

pno

The partition number for the input data set of the record causing the error reported on this line.

ddsrn

The relative record number in the input data set of the record causing the error reported on this line, if discard processing is in effect. Otherwise, *ddsrn* is blank.

type

A description of the type of error reported on this line, as follows:

- Conversion
- Field specification
- Validation
- Part Specification
- Unexpected
- Column specification
- Referential integrity
- Check constraint
- Duplicate key.

name1

The name of the table for which the record causing the error was targeted, if this information is pertinent for the type of error reported on this line. Otherwise, *name1* is blank. This field has nonblank values for the following error types:

- Conversion
- Validation
- Column specification
- Referential integrity (primary).
- Check constraint

name2

The name of the field or fanset involved in the error reported on this line, if this information is pertinent for the type of error reported. Otherwise, *name2* is blank. This field contains a field name for the following types of errors:

- Conversion
- Field specification
- Column specification.

For primary referential integrity errors, *name2* is a relationship name. For check constraint errors, *name2* is a check constraint name.

idsrn2

The input data set record number of a related error. For duplicate key errors, it gives the input data set record number of the record whose key is duplicated. For secondary referential integrity errors, it gives the input data set record number of the record whose primary referential integrity error cascaded to cause this secondary error. For other types of errors, this field is unused.

System action

Processing continues.

Severity

4 (warning)

DSNU1114I ***csect-name*** **(RE)LOAD PHASE STATISTICS NUMBER OF RECORDS LOADED =** ***nnnn*** **FOR TABLE** ***table-name***

Explanation

When the SHRLEVEL CHANGE option is specified, Db2 issues this message upon normal completion of the RELOAD phase of the LOAD utility.

csect-name
The name of the control section that issued the message.

nnnn
The number of records that are loaded into TABLE *table-name* from the source record data set. The source record data set is the data set that is identified by the INDDN option of LOAD.

table-name
The name of the table.

This message is repeated for each table that is loaded by the current LOAD utility statement.

System action

Processing of the RELOAD phase continues.

User response

Verify that the number of records that is reported in this message is consistent with expectations. For example, if four records are processed, expect to see `NUMBER OF RECORD LOADED = 4`.

Severity

0 (informational)

Related reference
LOAD (Db2 Utilities)

DSNU1115I ***csect-name nnnn*** **RESTART PHASE NOT ALLOWED IN THE (RE)LOAD PHASE, PHASE CHANGED TO CURRENT**

Explanation

A phase restart was requested for a LOAD utility job with the SHRLEVEL CHANGE option. (A phase restart is indicated by the parameter RESTART(PHASE).) A phase restart is not allowed for LOAD SHRLEVEL CHANGE.

csect-name
The name of the control section that issued the message.

System action

Processing of the RELOAD phase continues.

User response

No action is necessary. If you need to restart the utility again, use the RESTART parameter instead of the RESTART(PHASE) parameter.

Severity

4 (warning)

Related concepts
Restart of LOAD (Db2 Utilities)
Related tasks
Restarting an online utility (Db2 Utilities)

DSNU1116I ***csect-name*** **FOREIGN KEY HAS NO PRIMARY KEY FOR RELATIONSHIP=*r1* INPUT RECORD NUMBER=*nnnn***

Explanation

Input record *nnnn* has no primary key for the relationship with the name *r1*. The row is not loaded.

System action

Processing continues.

User response

None required.

Severity

4 (warning)

DSNU1117I ***csect-name*** **- UNIQUE INDEX KEY DUPLICATES KEY OF INDEXED RECORD AT RID *existing-RID* INDEX = *index-name* TABLE = *table-name* RECNO = *duplicate-RID***

Explanation

An input data set record that was loaded into a table duplicates the key value of a record that is already in the table. This situation causes a unique index violation.

csect-name
The name of the control section that issued the message.

existing-RID
The record ID that was already in the table.

index-name
The name of the index that is missing or incorrectly defined.

table-name
The name of the table.

duplicate-RID
The new record ID, which would cause the unique index violation.

System action

Processing stops if the LOAD utility job with the SHRLEVEL CHANGE option is on a table space that is defined with the NOT LOGGED attribute. If the table space is partitioned, all partitions where at least one row was loaded are placed in the RECOVER-pending (RECP) and logical page list (LPL) states.

Otherwise, processing continues. No index entry is created for the record at RID *duplicate-RID*.

User response

No action is required.

Severity

4 (warning)

8 (error)

Related tasks

Obtaining information about and handling pages in error (Db2 Administration Guide)

Related reference

RECOVER-pending status (Db2 Utilities)

DSNU1118I ***csect-name*** **(RE)LOAD PHASE STATISTICS - *nnnn* DUPLICATE KEY ERRORS ENCOUNTERED**

Explanation

Duplicate key errors were found by the LOAD utility during the RELOAD phase.

csect-name
The name of the control section that issued the message.

nnnn
The number of duplicate key errors.

System action

Processing continues.

Severity

0 (informational)

Related concepts

How LOAD builds indexes while loading data (Db2 Utilities)

DSNU1119I ***csect-name*** **(RE)LOAD PHASE STATISTICS *violation-count* CONSTRAINT VIOLATIONS ENCOUNTERED**

Explanation

The LOAD utility found the indicated number of referential constraint violations during the RELOAD phase.

csect-name
The name of the control section that issued the message.

violation-count
The number of referential constraint violation errors.

System action

Processing continues.

User response

Correct any referential constraint violations.

Severity

0 (informational)

Related concepts

Referential constraints (Introduction to Db2 for z/OS)

Referential constraint violations (Db2 Utilities)

Related reference

LOAD (Db2 Utilities)

DSNU1120I ***lob-or-xml*** **TABLE NOT DEFINED**

Explanation

The LOB or XML table space *dbname.tsname* has been created, but no auxiliary table has been created in it.

System action

Utility operation is terminated with return code 8.

User response

Complete the definition of the LOB table space before resubmitting the utility.

Severity

8 (error)

DSNU1121I ***csect-name*** **(RE)LOAD PHASE STATISTICS - NUMBER OF RECORDS LOADED = *nnnn* FOR TABLE *table-name* PART *part-number***

Explanation

The LOAD utility loaded the indicated number of records from the source record data set into the specified partition of the specified table.

csect-name
The name of the control section that issued the message.

nnnn
The number of records loaded into the partition.

table-name
The name of the table.

part-number
The value that identifies the partition or data set.

Db2 issues this message upon normal completion of the RELOAD phase of LOAD. The message repeats for each INTO TABLE PART clause in the LOAD utility statement.

System action

Processing continues.

User response

Verify that the reported number of records is consistent with expectations.

Severity

0 (informational)

Related reference
LOAD (Db2 Utilities)

DSNU1122I ***csect-name*** **JOB** ***job-name*** **PERFORMING** ***util-type*** **WITH UTILID** ***util-id*** **UNABLE TO DRAIN** ***object-name*****. RETRY** ***n*** **OF** ***m*** **WILL BE ATTEMPTED IN** ***s*** **SECONDS**

Explanation

A utility job with the RETRY option was unable to drain a table space, table space partition, or index. The utility will attempt to acquire the drain again after a delay.

csect-name
The name of the control section that issued the message.

job-name
The utility job name.

util-type
The utility.

util-id
The utility ID.

object-name
The name of the object.

n
The number of times that the utility attempted to drain the object, including the upcoming attempt.

m
The maximum number of times that the utility will attempt to drain the object.

s
The number of seconds until the next attempt to drain the object.

System action

The utility job attempts to acquire a restrictive access to the referenced object. If unsuccessful, the utility tries again.

User response

Optionally, you can determine who has claims on the object by using the DISPLAY DATABASE command with CLAIMERS option, and then cancel or end those threads.

Severity

0 (informational)

Related reference
-DISPLAY DATABASE (Db2) (Db2 Commands)

DSNU1124I ***csect-name*** **- UNIQUE INDEX KEY DUPLICATES KEY OF INDEXED RECORD AT RID** ***existing-RID*** **INDEX =** ***index-name*** **TABLE =** ***table-name*** **RECNO =** ***duplicate-RID*** **FOR PART =** ***part-number***

Explanation

In a LOAD utility job, the input data set record for the specified partition would cause a unique index violation. The record duplicates the key value of a record that is already in the table at the specified record ID (RID). The record was not loaded.

csect-name
The name of the control section that issued the message.

existing-RID
The RID that is already in the table.

index-name
The name of the index that would have a unique index violation if the record was loaded.

table-name
The name of the table.

duplicate-RID
The new RID, which would cause the unique index violation.

part-number
The value that identifies the partition or data set.

System action

If LOAD with the SHRLEVEL CHANGE option was used on a table space that is defined with the NOT LOGGED attribute, processing stops. All partitions where at least one row was loaded by the current LOAD job are placed into the RECOVER-pending (RECP) and logical page list (LPL) states.

Otherwise, processing continues. No index entry is created for the record at RID *duplicate-RID*.

User response

No action is required.

Severity

4 (warning)

8 (error)

Related tasks
Obtaining information about and handling pages in error (Db2 Administration Guide)
Related reference
RECOVER-pending status (Db2 Utilities)
LOAD (Db2 Utilities)

DSNU1125I ***csect-name*** **FOREIGN KEY HAS NO PRIMARY KEY FOR RELATIONSHIP=*r1* INPUT RECORD NUMBER=*nnnn*,FOR PART *m***

Explanation

Input record *nnnn* for partition *m* for table *table* has no primary key for the relationship with the name *r1*. The row is not loaded.

System action

Processing continues.

User response

None required.

Severity

4 (warning)

DSNU1126I ***csect-name*** **PARTITION *n* IS SPECIFIED IN MORE THAN ONE INTO TABLE PART CLAUSE, PARTITION PARALLELISM IS DISALLOWED**

Explanation

LOAD partition parallelism was requested via INDDN or INCURSOR following INTO TABLE PART clauses. However, the same partition was specified on more than one INTO TABLE PART clause. Partition parallelism is not supported for this case.

System action

Utility operation is terminated with return code 8.

User response

Correct the LOAD statement in one of the following ways:

- Specify a different partition number on each INTO TABLE PART clause
- Remove the parallelism by removing the INDDN or INCURSOR keywords from the INTO TABLE PART clauses.

Severity

8 (error)

DSNU1127I ***csect-name op*** **OPERATION FOUND ON RECORD REMOVED BY DISCARD CRITERIA**

Explanation

Operation *op* was detected during a REORG SHRLEVEL CHANGE on a record removed during the UNLOAD phase.

System action

Utility processing is terminated.

User response

Rerun the utility when data being discarded by REORG is not being updated or deleted by applications or SQL.

Severity

8 (error)

DSNU1128I ***csect-name*** **FEWER PAGES THAN PARTS FOR REBALANCE**

Explanation

In attempting to rebalance partitions during REORG, it is estimated that there are fewer total pages than the number of partitions being rebalanced.

System action

Remove the REBALANCE keyword form the REORG until there is sufficient data to populate pages for every partition.

Severity

8 (error)

DSNU1129I ***csect-name*** **- PARTITION RANGE NOT CONTIGUOUS FOR REBALANCE**

Explanation

The partition range that was specified on a REORG REBALANCE does not represent a set of contiguous logical partitions. Due to a series of ALTER TABLE ADD PART and ALTER TABLE ROTATE PART statements, the physical partition numbers do not match the logical partition numbers.

The physical partition numbers that were specified as the REORG partition range do not represent a contiguous set of logical partitions. For example, physical partitions 1 and 2 might represent logical partitions 2 and 4.

System action

The REORG terminates with return code 8.

User response

Use the DISPLAY DATABASE command to identify a range of physical partition numbers that represent a contiguous set of logical partitions, and resubmit the REORG REBALANCE while specifying that physical partition range. Alternatively, omit the partition range on the REORG REBALANCE so that the entire table space is reorganized.

Severity

8 (error)

DSNU1130I ***csect-name*** **- NOT ALL PARTITIONS POPULATED BY REBALANCE - PROCESSING TERMINATES**

Explanation

The table space that is being reorganized has many rows with duplicate partitioning key values, and there were insufficient unique values to allow distributing rows across all partitions during a rebalance.

System action

The utility is terminated with return code 8. For REORG SHRLEVEL NONE, the table space is left in the recover pending restricted state.

User response

If the REORG was REORG SHRLEVEL NONE, recover the table space to the point in time before the REORG.

Severity

8 (error)

DSNU1132I ***csect-name*** **COPYDICTIONARY OPERAND CANNOT BE A PARTITION THAT IS BEING REPLACED**

Explanation

LOAD COPYDICTIONARY was specified on a partition that was also being replaced. COPYDICTIONARY is not supported for this case.

System action

Utility operation is terminated with return code 8.

User response

Correct the LOAD statement in one of the following ways:

- Specify a different partition number on the INTO TABLE PART clause.
- Specify a different partition number on the COPYDICTIONARY option.

Severity

8(error)

DSNU1133I ***csect-name*** **- INDEX BUILD DEFERRED FOR INDEX *index-name*. INDEX WILL BE LEFT IN RBDP STATE.**

Explanation

The LOAD utility job included the INDEXDEFER option, and the index build for the specified index or index partition was deferred.

csect-name
The name of the control section that issued the message.

index-name
The name of the index.

System action

The index build for the specified index is deferred and the index or index partition is left in REBUILD-pending (RBDP) status.

Utility processing continues.

User response

Use the REBUILD INDEX utility to rebuild the index after the LOAD job completes.

Severity

0 (informational)

Related reference
LOAD (Db2 Utilities)
REBUILD INDEX (Db2 Utilities)
REBUILD-pending status (Db2 Utilities)

DSNU1134I ***csect-name*** **- INDEX BUILD NOT DEFERRED FOR INDEX** ***index-name*****. REASON CODE=***reason-code***

Explanation

The LOAD utility specified the INDEXDEFER option, but the index build for the specified index was not deferred.

csect-name
The name of the control section that issued the message.

index-name
The name of the index.

reason-code
A numeric value that indicates the reason for the failure:

1
The specified index is an indexed foreign key and ENFORCE CONSTRAINTS was specified.

System action

Utility processing continues. The index build for the specified index is not deferred.

User response

No action is required.

Severity

4 (warning)

Related reference
LOAD (Db2 Utilities)

DSNU1135I **EXTENDED PAGE FORMAT CONVERSION ON XML TABLESPACE** ***object-type object-name*** **IS IGNORED**

Explanation

The conversion to extended page format for the target XML table space is ignored. The message occurs in the following situations:

- A partition-level REORG on the XML table space
- A REORG TABLESPACE SHRLEVEL NONE on the XML table space
- LOAD REPLACE on the base table space
- REBUILD on the node id index if the XML table space is not in extended page format

object-type
The type of object: TABLESPACE or NODE INDEX.

object-name
The name of the object:

- Database and table space name for the target of the conversion
- Creator name and index name for the target of the index conversion

System action

The request is ignored.

User response

Run a REORG TABLESPACE SHRLEVEL REFERENCE or CHANGE on the entire XML table space to convert it to extended page format.

Severity

4 (warning)

Related reference
REORG TABLESPACE (Db2 Utilities)

DSNU1136I ***csect-name*** **SYSLGRNX IS NOT USED FOR LOG READ DUE TO** ***reason-text***

Explanation

The REORG utility is not using the SYSLGRNX records to determine the log read range.

csect-name
The name of the control section that issued the message.

reason-text
The reason that the SYSLGRNX object is not used:

- LOGRANGES NO SPECIFICATION
- COPY NO INDEX
- DIRECTORY OBJECT
- SYSCOPY CATALOG OBJECT

System action

Utility processing continues.

Operator response

No action is required.

Severity

0 (informational)

Related reference
REORG TABLESPACE (Db2 Utilities)
REORG INDEX (Db2 Utilities)

DSNU1137I *csect-name* ALTER OF MAXRO DEFER TO *new-value* DETECTED

Explanation

A REORG utility statement that is specified with the MAXRO DEFER keywords has detected that the ALTER UTIL command changed the MAXRO value.

csect-name
The name of the control section that issued the message.

new-value
The new MAXRO value that was changed by the user using the ALTER UTIL command.

System action

Utility processing continues.

Operator response

No action is required.

Severity

0 (informational)

Related reference
REORG TABLESPACE (Db2 Utilities)
REORG INDEX (Db2 Utilities)

DSNU1138I *csect-name* DRAIN *claim-class* WITH START TIME *start-time* HAS COMPLETED SUCCESSFULLY

Explanation

The utility successfully drained the indicated claim class.

csect-name
The name of the control section that issued the message.

claim-class
The claim class that the utility drained.

start-time
The timestamp value for the start of the drain.

System action

Utility processing continues.

Operator response

No action is required.

Severity

0 (informational)

Related concepts
Claims and drains (Db2 Performance)
Related reference
LOAD (Db2 Utilities)
REORG TABLESPACE (Db2 Utilities)
REORG INDEX (Db2 Utilities)

DSNU1139I *csect-name* FINAL LOG ITERATION STATISTICS. NUMBER OF LOG RECORDS = *quantity-read*

Explanation

The LOG phase of the utility has completed.

csect-name
The name of the control section that issued the message.

quantity-read
The number of log records that were read. Application of some of these log records might be unnecessary. Therefore, the LOG phase might apply only a subset of these log records to the shadow data sets.

System action

Utility processing continues.

Operator response

No action is required.

Severity

0 (informational)

DSNU1140I ***csect-name*** **MESSAGE LIMIT OF** ***max-messages*** **HAS BEEN REACHED FOR** ***message-number*** **MESSAGES. NO MORE WILL BE ISSUED FOR THIS UTILITY**

Explanation

The number of instances of the indicated message that is issued during a utility operation has exceeded the maximum number that is permitted.

csect-name
The name of the control section that issued the message.

max-messages
The maximum number of messages that are issued before this message is issued. This value is controlled by the utility that issues message DSNU1140I.

message-number
The message number that has reached the limit and is now suppressed.

Examples:

LOAD example
The LOAD utility issues message DSNU1140I after 2000 instances of any of the following messages: DSNU313I, DSNU314I, DSNU1103I, DSNU1104I DSNU344I,DSNU345I, DSNU1107I, or DSNU1108I. Any rows that would have triggered the suppressed message are still discarded.

UNLOAD example
The UNLOAD utility issues message DSNU1140I after 2000 instances of message DSNU1239I when both of the following conditions are true:

- The UNLOAD statement includes either the FROMCOPY or FROMCOPYDDN option.
- The value of the MAXERR option in the UNLOAD statement is either a number greater than 2000 or the number 0.

Any rows that would have triggered the suppressed message are still not unloaded.

System action

Processing continues.

No additional instances of *message-number* messages are issued. Only the issuance of the message is suppressed. Any action that is associated with the suppressed message number still occurs.

User response

No action is required.

Severity

0 (informational)

Related reference

LOAD (Db2 Utilities)

Syntax and options of the UNLOAD control statement (Db2 Utilities)

Related information

DSNU313I
csect-name RECORD '*n*' WILL BE DISCARDED DUE TO PART OR HIGH KEY VALUE SPECIFICATION(S)

DSNU314I
csect-name RECORD 'n' WILL BE DISCARDED DUE TO WHEN SPECIFICATION(S)

DSNU1103I
csect-name RECORD '*record-num*' FOR PARTITION *part-num* WILL BE DISCARDED DUE TO PART OR HIGH KEY VALUESPECIFICATION(S)

DSNU1104I
csect-name RECORD 'n' FOR PARTITION *m* WILL BE DISCARDED DUE TO WHEN SPECIFICATION(S)

DSNU344I
csect-name - UNIQUE INDEX KEY DUPLICATES KEY OF INDEXED ROW AT RID *record-id* INDEX = *index-name* TABLE = *table-name* RECNO = *record-number* RID = *duplicate-id*

DSNU345I
csect-name UNIQUE INDEX KEY DUPLICATES KEY FROM INPUT DATASET RECORD *iiii* LOADED AT RID *rrrr* INDEX = *index-name* TABLE = *table-name* RECNO = *recno* RID = *duprid*

DSNU1107I
csect-name - UNIQUE INDEX KEY DUPLICATES KEY OF INDEXED ROW AT RID *record-id* INDEX = *index-name* TABLE = *table-name* RECNO = *record-number* FOR PART = *partition* RID = *duplicate-id*

DSNU1108I
csect-name UNIQUE INDEX KEY DUPLICATES KEY FROM INPUT DATASET RECORD *iiii* FOR PART *m* LOADED AT RID *rrrr* INDEX = *index-*

name TABLE = *table-name* RECNO = *recno* RID = *duprid*

DSNU1239I
csect-name - VERSION *version-number* OBDREC WAS NOT FOUND IN OBID *object-id*

DSNU1141I ***csect-name* INVALID DELIMITER CHARACTER *invalid-delimiter***

Explanation

The delimiter character *invalid-delimiter*, which was specified as the operand of a COLDEL, CHARDEL, or DECPT keyword, is not a valid delimiter.

System action

Utility processing is not initiated.

User response:
Correct the invalid delimiter characters and resubmit the job.

Severity

8 (error)

Related reference
Delimited file format (Db2 Utilities)

DSNU1142I ***csect-name* RECORD *n* DELIMITER MISMATCH FOR COLUMN *colname***

Explanation

A column or character delimiter character that marks the end of input for column *colname* was not found before the end of the record.

System action

Processing terminates. An abend is requested so that the LOAD can be restarted after the error is corrected.

User response

Find the failing record in the input data set, correct the condition that caused the error, and restart the LOAD utility.

Severity

8 (error)

DSNU1143I ***csect-name* RECORD *n* WILL BE DISCARDED DUE TO DELIMITER MISMATCH FOR COLUMN *colname***

Explanation

A column or character delimiter character that marks the end of input for column *colname* was not found before the end of the record. The record is not loaded, and is discarded during the DISCARD phase.

System action

The LOAD utility continues to process records in the input data set.

User response

After the LOAD utility completes, examine the records in the discard data set. Correct the errors in the discarded input data, and submit a LOAD RESUME YES job with the DISCARD data set as the input.

Severity

4 (warning)

DSNU1144I ***csect-name* FORMAT DELIMITED REQUIRES ONE INTO TABLE**

Explanation

LOAD FORMAT DELIMITED supports loading only a single table. LOAD FORMAT DELIMITED was specified in a LOAD statement with more than one INTO TABLE clause.

System action

Processing terminates.

User response

Correct the LOAD statement and resubmit the utility.

Severity

8 (error)

DSNU1145I **THE OBJECT CONVERSION TO BASIC PAGE FORMAT IS PREVENTED BY THE NOBASIC SETTING OF SUBSYSTEM PARAMETER UTILITY_OBJECT_CONVERSION**

Explanation

Either an attempt was made to convert an object to basic 6-byte page format when it is in extended 10-byte page format or to keep the object in basic 6-byte page format instead of converting it to extended 10-byte format. This action is not allowed when the UTILITY_OBJECT_CONVERSION subsystem parameter is set to NOBASIC.

System action

Utility processing is terminated.

User response

Resubmit the job without the RBALRSN_CONVERSION keyword or with the RBALRSN_CONVERSION EXTENDED keywords. If the object of the utility needs to be converted to basic 6-byte page format or stay in basic 6-byte page format, contact the database administrator to change the UTILITY_OBJECT_CONVERSION subsystem parameter.

Severity

8 (error)

Related reference

REORG TABLESPACE (Db2 Utilities)

DSNU1147I ***csect*** **- (RE)LOAD PHASE STATISTICS - TOTAL NUMBER OF RECORDS LOADED=*nnnn* FOR TABLESPACE *dbname.tsname***

Explanation

This message is issued at the normal completion of the RELOAD phase of the LOAD utility. It indicates the total number of records loaded into the table space.

System action

The utility continues.

User response

The user can verify that the number of records matches expectations. The total includes all records loaded into all tables for a segmented or nonpartitioned table space, and all records loaded into partitions for a partitioned table space.

Severity

0

DSNU1148I ***csect*** **- (RE)LOAD PHASE STATISTICS - NUMBER OF INPUT RECORDS PROCESSED=*nnnn* FOR PART *n***

Explanation

The message is issued from the LOAD utility when LOAD partition parallelism is being used and the loading of partition *n* has been completed. The message indicates the total number of records that were processed from the input file for the partition. The message is issued for each partition being loaded.

System action

The utility continues.

User response

The user can verify that the number of records matches expectations.

Severity

0

DSNU1149I ***csect*** **- (RE)LOAD PHASE STATISTICS - NUMBER OF INPUT RECORDS NOT LOADED=*nnnn* FOR PART *n***

Explanation

The message is issued from the LOAD utility when LOAD partition parallelism is being used and the loading of partition *n* has been completed. It indicates the total number of records from the input file for partition *n* that were not loaded. The records might not have been loaded because they were excluded by a WHEN clause, because their partitioning key did not match partition *n*, or because there was an error processing the record.

The message is not issued if *nnnn* is zero, or if the job was restarted from the last commit point.

System action

The utility continues.

User response

The user can verify that the number of records matches expectations. For example, if this message appears it might be an indication that some rows in the input file belong in other partitions, and should have been loaded into those partitions.

Severity

0

DSNU1150I ***csect*** **- (RE)LOAD PHASE STATISTICS - NUMBER OF INPUT RECORDS NOT LOADED=*nnnn***

Explanation

The message is issued at the normal completion of the RELOAD phase of the LOAD utility. It indicates the total number of records from the input file or files that

were not loaded. The records might not have been loaded for one of the following reasons:

- They were excluded by a WHEN clause
- They were being loaded into a specific partition with INTO TABLE PART but their partitioning key did not match that partition
- There was an error processing the record

The message is not issued if *nnnn* is zero, or if the job was restarted from the last commit point.

System action

The utility continues.

User response

The user can verify that the number of records matches expectations. For example, when loading into a single partition, if this message appears it might be an indication that some rows in the input file belong in other partitions, and should have been loaded into those partitions.

Severity

0

DSNU1151I csect-name REORGLOB PHASE COMPLETE - NUMBER OF RECORDS PROCESSED = nnnnnnnn

Explanation

This message is issued at the normal completion of the REORGLOB phase of the REORG utility. It indicates the number of records processed by the utility.

User response

Verify the number of records loaded into the LOB table space.

Severity

0 (informational)

DSNU1152I *csect-name utility-name* SHRLEVEL *option* OF *object-type object-qualifier.object-name*

Explanation

The SHRLEVEL option was specified incorrectly for a utility.

csect-name
The name of the control section that issued the message.

utility-name
The name of the utility: REORG TABLESPACE, REORG INDEX, or REBUILD INDEX.

option
The SHRLEVEL option: CHANGE, REFERENCE, or NONE. The combination of *option* and *utility-name* indicates what has occurred.

CHANGE
If *utility* is REORG TABLESPACE: SHRLEVEL CHANGE was specified when REORG TABLESPACE was run on a NOT LOGGED table space, or on a LOB table space for which the base table space is a NOT LOGGED table space.

If *utility* is REBUILD INDEX or REORG INDEX: SHRLEVEL CHANGE was specified when REBUILD INDEX or REORG INDEX was run on an index that is defined on a NOT LOGGED table space.

REFERENCE
SHRLEVEL REFERENCE was specified when REORG TABLESPACE with PART was run on a NOT LOGGED table space on which nonpartitioned indexes are defined.

NONE
SHRLEVEL NONE cannot be specified in the following situations:

- For a table space with hash organization.
- When REORG TABLESPACE is run against either DSNDB06.SYSTSVOL or DSNDB06.SYSTSSTG and the table space has a user-defined index that uses a storage group that is managed by Db2.

object-type
The type of object: INDEX, INDEXSPACE, or TABLESPACE.

object-qualifier.object-name
The name of the object, as a qualified name.

System action

If the utility was operating on a list of objects and OPTIONS EVENT(ITEMERROR,SKIP) was specified, then processing continues to the next object in the list. Otherwise, processing terminates.

Operator response

Take the appropriate action for the *object-type* value:

NOT LOGGED TABLESPACE
Remove the SHRLEVEL(CHANGE) or SHRLEVEL(REFERENCE) option from the utility statement.

HASH TABLESPACE
Specify either SHRLEVEL(CHANGE) or SHRLEVEL(REFERENCE) option in the utility statement

Severity

8 (error)

DSNU1153I ***csect-name*** **LOG YES SPECIFIED FOR THE NOT LOGGED** ***obj-type objqual.obj-name*** **WILL BE IGNORED**

Explanation

LOG YES was specified for a LOAD, REORG, CHECK DATA, or REPAIR utility job that refers to an object with a NOT LOGGED logging attribute. Logging is not supported for a not logged table space.

System action

Processing continues, the LOG YES option is ignored.

User response

Remove the LOG YES option from the Utility input.

Severity

0 (informational)

DSNU1154I ***csect-name*** **RESTART OF THE UTILITY IS NOT ALLOWED AGAINST THE NOT LOGGED TABLE SPACE** ***objqual.obj-name***

Explanation

You cannot restart the LOAD utility job with the SHRLEVEL CHANGE option on a table space with the NOT LOGGED attribute. The failed LOAD job could not roll back to the previous commit point because the log records that are required to perform that function were not written.

csect-name
The name of the control section that issued the message.

objqual.obj-name
The qualified name of the target object.

System action

Processing terminates.

User response

Terminate the failed LOAD job. Before you rerun the job, recover the table space. Db2 recovers to the last image copy or to the point when CREATE or ALTER NOT LOGGED was done, whichever is most recent.

Severity

8 (error)

Related concepts
Effect on RECOVER of the NOT LOGGED or LOGGED table space attributes (Db2 Utilities)

DSNU1155I ***csect-name*** **- LOB TABLE SPACES WILL BE REORGANIZED IN PARALLEL WITH THE ASSOCIATED BASE TABLE SPACE OBJECTS**

Explanation

The REORG TABLESPACE utility will reorganize auxiliary LOB table spaces along with the associated base table space objects that were specified for the REORG.

csect-name
The name of the control section that issued the message.

System action

Processing continues.

User response

No action is required.

Severity

0 (informational)

Related reference
REORG TABLESPACE (Db2 Utilities)

DSNU1156I ***csect-name*** **- REORG TABLESPACE SHRLEVEL NONE OR AUX NO CANNOT BE RUN ON PARTITIONED TABLE SPACE IN REORG PENDING WITH LOB COLUMN DEFINED**

Explanation

REORG TABLESPACE has been executed with either SHRLEVEL NONE or AUX NO against a partitioned table space that has LOB columns defined. If the base table space is in a REORG PENDING state, then all auxiliary LOB table spaces must be reorganized along with the base table space. When REORG TABLESPACE is executed with either SHRLEVEL NONE or AUX NO, and

the base table space is in a REORG PENDING state, the reorganization cannot happen.

csect-name
The name of the control section that issued the message.

System action

Processing of the REORG utility job ends.

User response

Execute REORG TABLESPACE against the partitioned table space and specify either SHRLEVEL REFERENCE or CHANGE AUX YES.

Severity

8 (error)

Related reference
REORG TABLESPACE (Db2 Utilities)

DSNU1157I ***csect-name*** **- INLINE IMAGE COPIES ARE NOT CREATED FOR AUXILIARY TABLE SPACES REORGANIZED AND ARE LEFT IN COPY PENDING**

Explanation

A REORG TABLESPACE job that uses the AUX YES option (either explicitly or as the default option) is unable to create inline image copy data sets for one or more LOB table spaces that were reorganized.

csect-name
The name of the control section that issued the message.

System action

Processing of the REORG TABLESPACE utility job continues. This condition does not prevent the REORG job from completing successfully, but the LOB table spaces are left in COPY-pending status.

User response

Create an image copy on the affected LOB table spaces after REORG completes.

Severity

4 (warning)

Related reference
REORG TABLESPACE (Db2 Utilities)
COPY-pending status (Db2 Utilities)

DSNU1158I ***csect-name*** **- REORG TABLE SPACE SHRLEVEL NONE OR AUX NO CAN NOT BE RUN ON TABLE SPACE WITH ALTERED INLINE LOB COLUMNS**

Explanation

The auxiliary LOB table space must be reorganized along with the base table space because one or more LOB columns have an altered INLINE LENGTH that must be materialized.

csect-name
The name of the control section that issued the message.

System action

The REORG utility is terminated.

Programmer response

Execute the REORG TABLESPACE utility and specify either the SHRLEVEL REFERENCE or SHRLEVEL CHANGE keyword and the AUX YES keyword.

Related reference
REORG TABLESPACE (Db2 Utilities)

DSNU1159I ***csect-name*** **- THE POINT-IN-TIME RECOVERY PROCESS WAS NOT COMPLETED ON TABLESPACE** ***tablespace-name***

Explanation

The specified base table space and the associated LOB table space were reorganized to materialize pending definition changes. After that REORG job was run, a RECOVER job was run to recover the data to a point in time before the REORG job ran. A subsequent REORG job must be run on the base table space and the LOB table space to complete the point-in-time recovery process. However, the REORG statement was executed on the base table space first, so the LOB table space could not be reorganized.

tablespace-name
The name of the table space.

System action

Utility processing is not initiated.

User response

Run REORG on the LOB table space first, and then run REORG on the base table space to complete the point-in-time recovery process.

Severity

8 (error)

Related reference

REORG TABLESPACE (Db2 Utilities)

DSNU1160I ***csect-name*** **- PARTITIONS WILL BE UNLOADED/RELOADED IN PARALLEL, NUMBER OF TASKS=*n***

Explanation

The REORG TABLESPACE utility is able to unload and reload partitions in parallel. The number of tasks started is *n*.

System action

REORG processing continues with the UNLOAD phase.

Severity

0 (informational)

DSNU1161I ***csect-name*** **- NON-PARTITIONED INDEXES WILL BE UNLOADED IN PARALLEL, NUMBER OF TASKS=*n***

Explanation

The REORG TABLESPACE SHRLEVEL CHANGE or REFERENCE utility is operating on a subset of the partitions of a partitioned table space. The table space has one or more NPIs, and the utility has determined that the NPIs can be unloaded in parallel with the unload of the table space partitions. The number of tasks started is *n*.

System action

REORG processing continues with the UNLOAD phase.

Severity

0 (informational)

DSNU1162I ***csect-name*** **- LOG APPLIES WILL BE PERFORMED IN PARALLEL, NUMBER OF TASKS=*n***

Explanation

The REORG TABLESPACE SHRLEVEL CHANGE or REFERENCE utility has determined that data partition and index log records can be applied to the shadow data sets in parallel. The number of tasks started is *n*.

System action

REORG processing continues with the LOG phase.

Severity

0 (informational)

DSNU1163I ***csect-name*** **- APPLYING PENDING DEFINITION CHANGES COMPLETE FOR *database-name.object-name*.**

Explanation

Pending definition changes are being applied.

csect-name
The name of the control section that issued the message.

database-name.object-name
The name of the object, qualified by the name of the database.

This message is for informational purposes only.

System action

Utilities continue to process.

User response

No action is required.

Severity

0 (informational)

DSNU1164I ***csect-name*** **- PENDING DEFINITION CHANGES ARE NOT APPLIED FOR*database-name.object-name* BECAUSE THE ENTIRE OBJECT WAS NOT SPECIFIED.**

Explanation

Pending definition changes at the table space or index level were not applied because the entire object was not specified. This message is issued in response to the REORG utility.

csect-name
The name of the control section that issued the message.

database-name.object-name
The name of the object, qualified by the name of the database.

System action

Utilities continue to process.

User response

Run the utility on the entire object to apply pending definition changes.

Severity

4 (warning)

DSNU1165I ***csect-name*** **- REORG WITH SHRLEVEL NONE OR FASTSWITCH NO DOES NOT APPLY PENDING DEFINITION CHANGES for** ***database-name.object-name*****.**

Explanation

The REORG utility reorganized the object. However, pending definition changes were not materialized, because SHRLEVEL NONE or FASTSWITCH NO was specified in the REORG statement.

csect-name
The name of the control section that issued the message.

database-name.object-name
The name of the object, qualified by the name of the database.

System action

Utilities continue to process.

User response

To materialize the pending definition changes, run REORG with SHRLEVEL REFERENCE or SHRLEVEL CHANGE and do not specify FASTSWITCH NO.

Severity

4 (warning)

Related reference
Syntax and options of the REORG TABLESPACE control statement (Db2 Utilities)

DSNU1166I ***csect-name*** **- SOME PARTITION STATISTICS MAY HAVE BECOME OBSOLETE ON** ***database-name.object-name*****.**

Explanation

Some partition statistics might be no longer accurate.

csect-name
The name of the control section that issued the message.

database-name.object-name
The name of the object, qualified by the name of the database.

Partition statistics can become obsolete because of the materialization of pending definition changes. The following partition statistics might be obsolete:

- COLGROUP statistics
- KEYCARD statistics
- HISTOGRAM statistics
- Frequency statistics with NUMCOLS > 1
- Statistics for extended indexes, where applicable.

System action

Utilities continue to process.

User response

Run the RUNSTATS utility to collect the partition statistics again.

Severity

4 (warning)

Related reference
RUNSTATS (Db2 Utilities)

DSNU1167I ***csect-name*** **- UNABLE TO ACCOMMODATE THE EXISTING USER DATA IN TABLESPACE** ***database-name.tablespace-name*** **BECAUSE THE NEW SEGSIZE OR THE NEW DSSIZE IS TOO SMALL.**

Explanation

The new SEGSIZE or the new DSSIZE in one of the pending ALTER definition changes is too small to accommodate the existing data.

csect-name
The name of the control section that issued the message.

database-name
The name of the database.

tablespace-name
The name of the table space.

System action

Utility processing stops.

User response

Adjust the space attributes for the table space so that all existing data will fit, then run the utility again.

Severity

8 (error)

DSNU1168I ***csect-name*** **- KEYWORD PART IS INVALID FOR RESETTING AREOR DBET STATE.**

Explanation

The keyword PART is not valid when NOAREORPEND is specified because the AREOR state can be reset only for the entire table space or index space.

csect-name
The name of the control section that issued the message.

System action

Utility processing stops.

User response

Correct the utility statement.

Related reference
REPAIR (Db2 Utilities)

DSNU1169I ***object-type object-name partition*** **CONVERTED BY** ***conversion-cause*** **TO** ***new-format*** **RBA/LRSN FORMAT**

Explanation

LOAD, REBUILD, REORG, or RECOVER is converting the RBA or LRSN format of a database object.

object-type
The object type: TABLESPACE or INDEXSPACE.

object-name
The two-part object name.

partition
PARTITION or DSNUM and an integer value. The value is omitted for nonpartitioned objects.

conversion-cause
The cause of the conversion:

ZPARM
Requested by UTILITY_OBJECT_CONVERSION subsystem parameter.

KEYWORD
Requested by RBALRSN_CONVERSION keyword.

IMAGE COPY
Restored from an image copy.

LOG LIMIT
Forced by 6-byte logging limit.

new-format
The new format of the object: BASIC or EXTENDED.

System action

Processing continues.

User response

No action is required.

Severity

0 (informational)

DSNU1170I ***csect-name*** **UNABLE TO EXTEND PARTITION-BY-GROWTH TABLESPACE** ***database-name.tablespace-name*** **BECAUSE OF** ***reason***

Explanation

The partition-by-growth table space could not be extended.

csect-name
The name of the control section that issued the message.

database-name.tablespace-name
The name of the database and table space.

reason
The reason that the partition could not be extended. *reason* can have one of the following values:

PARTITION RANGE
The space that exists in the current range of the partition is not large enough to hold all of the data.

LOB COLUMNS
Rows with LOB columns changed partitions during REORG. This change is not allowed. However, this partition change occurred, because a change has been made to the attributes of the table space so that a row with LOB columns cannot be reloaded to the partition to which it belongs.

MAXPARTITIONS LIMIT
The partition could not be extended because the number of partitions has reached the maximum partitions limit.

System action

Utility processing is discontinued.

User response

Take one of the actions that corresponds to the *reason* value:

PARTITION RANGE

- Correct the space attributes of the partition to fit all the data that you need in that partition. Then, run the utility job again.
- Reorganize more partitions, especially those partitions with free space.

LOB COLUMNS

- In your REORG TABLESPACE utility control statement, set the AUX option to YES so that the associated LOB table spaces are also reorganized. Then, run the utility job again.

MAXPARTITIONS LIMIT

- Increase the maximum number of partitions by using ALTER TABLESPACE.

Related reference

Syntax and options of the REORG TABLESPACE control statement (Db2 Utilities)

ALTER TABLESPACE (Db2 SQL)

DSNU1171I ***csect-name*- KEY EVALUATION ERROR OCCURRED DURING PROCESSING AT RID *rid* INDEX = *index-name* TABLE = *table-name* RECNO= *input-dataset-record-number for-part = part-num***

Explanation

A key evaluation error occurred when the extended index was built. The record was not loaded.

System action

Processing continues.

Severity

4 (warning)

DSNU1172I ***csect-name*- KEY EVALUATION ERROR OCCURRED DURING PROCESSING AT RID *rid* INDEX = *index-name* TABLE = *table-name* RECNO= *input-dataset-record-number for-part = part-num***

Explanation

A key evaluation error occurred when the extended index was built. The record was not loaded.

System action

Processing terminates. An abend is requested so that the LOAD can be restarted after the error condition is corrected.

User response

Find the failing record in the input data set, correct the condition that caused the key evaluation error, and restart the LOAD utility. You can optionally include a SYSDISC DD statement in the JCL input to hold copies of records that are not loaded.

Severity

8 (error)

DSNU1173I ***csect-name* TABLE SPACE *database-name.space-name* WILL BE CONVERTING FROM *old-format* TO *new-format***

Explanation

REORG TABLESPACE or LOAD REPLACE is converting the row format of a table space or partition as specified.

csect-name
The name of the control section that issued the message.

database-name
The name of the database.

space-name
The name of the table space or partitions.

old-format
The row format before the conversion.

new-format
The row format after the conversion.

System action

Processing continues.

User response

No action is required.

Severity

0 (informational)

DSNU1174I ***csect-name* TABLE SPACE *database-name.space-name* WILL REMAIN IN *old-format* DUE TO *explanation-text***

Explanation

csect-name
The name of the control section that issued the message.

database-name
The name of the database.

space-name
The name of the table space or partitions.

old-format
The row format before the conversion attempt.

explanation-text
The reason why the conversion did not complete.

System action

Processing continues.

User response

No action is required.

Severity

0 (informational)

DSNU1175I ***csect-name*** **INPUT FIELD(S) - CONTAIN ONE OR MORE INSTANCES WHICH WHEN CONVERTED TO DECFLOAT RESULTED IN ONE OF THESE CONDITIONS (OVERFLOW, UNDERFLOW, SUBNORMAL, INEXACT), AND THE RESULT VALUE MAY BE ROUNDED**

Explanation

The utility for LOAD or UNLOAD converts the input value, but the converted value is out of the normal range, and it has possibly been rounded.

System action

The utility for LOAD or UNLOAD continues processing.

Severity

4 (warning)

DSNU1176I ***csect-name*** **- FUNCTION** ***function*** **IS NOT SUPPORTED FOR LOB OR XML TABLE SPACES**

Explanation

The function specified, *function*, is not supported for LOB/XML table spaces.

System action

Utility processing continues.

Programmer response

When using COPYDDN/RECOVERYDDN in LOAD for a table with LOB/XML columns, an inline copy is taken only of the base table space, not the LOB/XML table space. You must perform the tasks separately.

When using STATISTICS in LOAD for a table with LOB/XML columns, inline statistics are collected on the base table space, but not on the LOB/XML table space. You must perform the tasks separately.

Severity

0 (informational)

DSNU1177I ***csect-name*** **TABLE SPACE WILL BE LOADED IN PARALLEL, NUMBER OF TASKS =** ***number-of-tasks***

Explanation

The LOAD utility is able to load the table space in parallel.

csect-name
The name of the control section that issued the message.

number-of-tasks
The number of utility tasks that are used to load the table space in parallel.

If you specified the SHRLEVEL CHANGE option for LOAD, this number references the degree of both conversion and insertion parallelism. If you specified the SHRLEVEL NONE option, this number references only the degree of conversion parallelism.

System action

Utility processing continues in the RELOAD phase.

User response

You can verify that the reported number of tasks is consistent with your expectations.

Severity

0 (informational)

Related reference
LOAD (Db2 Utilities)

DSNU1179I ***csect-name*** **THE SQL STATEMENT EXCEEDS THE MAXIMUM ALLOWED LENGTH**

Explanation

The statement cannot be executed because it exceeds the system limits length.

System action

The statement cannot be executed.

User response

Break the statement into shorter, or less complex, SQL statements.

Severity

8 (error)

DSNU1180I ***csect-name*** **SQLCODE=0, SUCCESSFUL EXECUTION**

Explanation

The SQLCODE was 0, indicating successful execution of the function. SQLWARN indicators might note some warnings.

csect-name
The name of the control section that issued the message.

System action

Utility processing continues.

Operator response

No action is required.

Severity

0 (informational)

Related concepts
SQL communication area (SQLCA) (Db2 SQL)
Related reference
Description of SQLCA fields (Db2 SQL)

DSNU1184I ***csect-name*** **- SQLCODE =*sqlcode*, *explanation***

Explanation

This message contains an SQL return code and a brief explanation, with the text inserted from the SQLERRM field. The SQL return code is positive, indicating a warning condition.

System action

Utility processing continues.

Severity

4 (warning)

Related concepts
Successful execution SQL codes (Db2 Codes)
Related reference
Description of SQLCA fields (Db2 SQL)

DSNU1188I ***csect-name*** **- SQLCODE = -*sqlcode*, *explanation***

Explanation

This message contains an SQL return code and a brief explanation, with the text inserted from the SQLERRM field. The SQL return code is negative, indicating that an error has occurred.

System action

Further utility processing is terminated.

User response

Determine the cause for the SQL error by using information about that specific SQLCODE. Correct the error. Rerun the application program or SQL statement.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Listing of the results produced by the SQL statements.
- Source listing of the failing application program.

Severity

8 (error)

Related concepts
SQL error codes (Db2 Codes)
Related reference
Description of SQLCA fields (Db2 SQL)

DSNU1189I ***csect-name*** **- CURSOR *cursor-name* ALREADY DECLARED**

Explanation

The indicated *cursor-name* was declared previously in the SYSIN data set.

System action

Utility processing is not initiated.

User response

Eliminate the duplicate DECLARE CURSOR and resubmit the utility job.

Severity

8 (error)

Related reference

EXEC SQL (Db2 Utilities)

DSNU1190I ***csect-name*** **- CURSOR** ***cursor-name*** **NOT DECLARED**

Explanation

A utility control statement used a cursor that was not found in SYSIN.

System action

Utility processing is not initiated.

User response

Provide the missing DECLARE CURSOR in SYSIN prior to its use and resubmit the utility job.

Severity

8 (error)

Related reference

EXEC SQL (Db2 Utilities)

DSNU1191I ***csect-name*** **SQLCAID =** ***xxxx*****, SQLCA IDENTIFIER**

Explanation

The SQLCA ID field (SQLCAID) is not the expected value, C'SQLCA'.

System action

Utility processing continues.

User response

The SQLCA area is invalid.

Problem determination

This error is an internal error.

Severity

0 (informational)

DSNU1192I ***csect-name*** **SQLCABC =** ***xxxx*****, SQLCA BYTE COUNT**

Explanation

The size of the SQLCA is not the expected value (136 bytes).

System action

Utility processing continues.

User response

The SQLCA area is invalid.

Problem determination

This error is an internal error.

Severity

0 (informational)

DSNU1193I ***csect-name*** **SQLCODE =** ***xxxx*****, INVALID SQLCODE**

Explanation

The SQL return code is not a valid value.

System action

Utility processing continues.

User response

Either the SQLCA area is invalid or the maintenance was not coordinated correctly. As a result, the SQL return code was added to the Db2 subsystem but not to the formatting routine. If the maintenance was not coordinated correctly, the DSNTIAM CSECT was probably not replaced in the current STEPLIB or JOBLIB.

Problem determination

If DSNTIAM is current then this error is an internal error.

Severity

0 (informational)

DSNU1194I *csect-name* SQLERRM = *xxxx*, SQLCA ERROR MESSAGE INSERTION TEXT

Explanation

This message results from an SQL return code that is not recognized by DSNTIAR. SQLERRM contains error message test.

System action

Utility processing continues.

User response

Either the SQLCA area is invalid or the maintenance was not coordinated correctly. As a result, the SQL return code was added to the Db2 subsystem but not to the formatting routine. If the maintenance was not coordinated correctly, the DSNTIAM CSECT was probably not replaced in the current STEPLIB or JOBLIB.

Problem determination

If DSNTIAM is current then this error is an internal error.

Severity

0 (informational)

DSNU1195I *csect-name* SQLERRP = *xxxx*, SQL PROCEDURE DETECTING ERROR

Explanation

The name of the procedure detecting the error is provided in the SQLERRP.

System action

Utility processing continues.

User response

Correct the error if one is noted in other messages. The SQL procedure detecting the error might be of help in diagnosing an error or warning. Rerun the SQL statement.

Problem determination

If DSNTIAM is current then this error is an internal error.

Severity

0 (informational)

DSNU1196I SQLERRD = *field-1*, *field-2*, *field-3*, *field-4*, *field-5*, *field-6* SQL DIAGNOSTIC INFORMATION

Explanation

One or more of the six diagnostic fields do not have the expected value. The diagnostic fields should contain one of the following expected sets of values:

- 00, 00, 00, 00, 00, 00
- 00, 00, 00, -1, 00, 00

field-1
Db2 unique internal relational data system code.

field-2
Db2 internal data manager error code.

field-3
One of the following conditions:

- Number of rows inserted, updated, or deleted following an INSERT, UPDATE, MERGE or DELETE statement.

  

  Attention: A -1 in this field indicates that a mass delete of a table in a segmented table space was performed, wherein Db2 does not access nor count individual rows.

- For SQLCODE -911 or -913, a reason code that indicates whether a deadlock or timeout occurred.

  Tip: The most common reason codes are:

  – 00C90088 - deadlock
  – 00C9009E - timeout

field-4
Reserved.

field-5
Position or column of a syntax error for PREPARE or EXECUTE IMMEDIATE.

field-6
Db2 internal buffer manager error code.

System action

Utility processing continues.

User response

The SQL diagnostic information might help in diagnosing an error or in indicating the results of successful execution. If this error or warning occurs, correct the error. Rerun the program or SQL statement.

Severity

0 (informational)

Related reference

GET DIAGNOSTICS (Db2 SQL)

Description of SQLCA fields (Db2 SQL)

Related information

-911 (Db2 Codes)

-913 (Db2 Codes)

00C90088 (Db2 Codes)

00C9009E (Db2 Codes)

DSNU1197I SQLWARN*n*-*n* SQL WARNINGS

Explanation

At least one of the eleven (11) warning values is not the expected value (a blank). A nonblank value in one of the 11 warning fields has one of the following meanings:

SQLWARN0
Any other warning code is set.

SQLWARN1
String truncation.

SQLWARN2
Null values eliminated.

SQLWARN3
Number of host variables provided did not equal degree of the table.

SQLWARN4
No WHERE clause on UPDATE or DELETE.

SQLWARN5
Not a Db2 SQL statement.

SQLWARN6
Date or timestamp value adjusted.

SQLWARN7
Conversion of decimal number from precision 31 to precision 15 caused truncation of fractional digits.

SQLWARN8
Untranslatable character replaced with substitute.

SQLWARN9
Arithmetic exceptions have been ignored during processing of COUNT DISTINCT.

SQLWARNA
At least one character field of the SQLCA is invalid due to a string translation error.

System action

Utility processing continues.

User response

The SQL warning information might be of help in diagnosing an error or in indicating the results of successful execution. If this warning should occur, correct the error and rerun the program or SQL statement.

Severity

0 (informational)

DSNU1198I SQLSTATE = *sqlstate*, SQLSTATE RETURN CODE

Explanation

The SQLSTATE is a return code that indicates the outcome of the most recently executed SQL statement. The execution of every SQL statement sets SQLSTATE to a five-digit code in the range of 00000 to 65535. The SQLSTATE has no effect on the existing use of any other field in the SQLCA.

System action

Utility processing continues.

User response:
Use the return code value to determine the problem. If necessary, correct the SQL statement and issue it again.

Severity

0 (informational)

Related tasks

Checking the execution of SQL statements by using SQLCODE and SQLSTATE (Db2 Application programming and SQL)

Related reference

SQLSTATE values and common error codes (Db2 Codes)

SQLSTATE (Db2 SQL)

DSNU1199I *csect-name text*

Explanation

Unexpected message was returned from DSNTIAR.

System action

Utility processing continues.

User response

This error is an internal error.

Severity

0 (informational)

DSNU1201I ***csect-name*** **- PARTITIONS WILL BE UNLOADED IN PARALLEL, NUMBER OF TASKS =** ***nnnn***

Explanation

The message indicates that the UNLOAD utility is able to unload partitions in parallel. The number of utility tasks used to unload partitions is indicated by *nnnn*.

System action

Processing of the UNLOAD phase will continue.

Severity

0 (informational)

DSNU1202I ***csect-name*** **- SAMPLING LIMIT HAS BEEN REACHED FOR TABLE** ***table-name***

Explanation

In the UNLOAD statement, the LIMIT option is specified for table *table-name* and the number of unloaded rows from the table has reached the specified LIMIT value.

System action

No more rows will be unloaded from the table, but the unloading operation will continue for the previously unloaded tables if they exist.

Severity

0 (informational)

DSNU1203I ***csect-name*** **- GENERATION OF LOAD STATEMENT IS BYPASSED FOR TABLE** ***table-name***

Explanation

The PUNCHDDN specification is omitted in a UNLOAD statement when partition parallelism is activated. The LOAD statement will not be generated for the indicated table.

System action

The UNLOAD job will continue.

Severity

0 (informational)

DSNU1204I DUPLICATE ROWS MIGHT HAVE BEEN UNLOADED

Explanation

The image copy contains duplicate pages. All rows from the duplicate pages are unloaded

System action

Processing continues.

Severity

4 (warning)

DSNU1211I ***csect-name*** **- INPUT DATA SET IS NOT AN IMAGE COPY**

Explanation

The input data set specified by the FROMCOPY or FROMCOPYDDN option of the UNLOAD utility was not identified as an image copy data set.

System action

The utility job terminates.

User response

Specify the correct image copy data set name to the FROMCOPY option, or to the DD-name that is referred to by the FROMCOPYDDN option.

Severity

8 (error)

DSNU1212I ***csect-name*** **- INVALID FIELD NAME** ***field-name*** **FOR TABLE** ***table-name***

Explanation

The specified field name in the field specification list of the UNLOAD utility is:

- Not a column name of the specified table, or
- An existing column name for the CONSTANT option.

The field name is not valid.

System action

The utility job terminates.

User response

For a CONSTANT field, specify a non-existing field name. Otherwise, specify the field name as a column name of the indicated table.

Severity

8 (error)

DSNU1213I ***csect-name*** **- INVALID FIELD TYPE FOR FIELD** ***field-name*** **FOR TABLE** ***table-name***

Explanation

The specified field type in the field specification list of the UNLOAD utility is incompatible with the base type of the corresponding column of the table.

System action

The utility job terminates.

User response

Specify only a compatible type allowed for the unload operation in the field specification list.

Severity

8 (error)

DSNU1214I ***csect-name*** **- INVALID FIELD POSITION SPECIFICATION FOR FIELD** ***field-name*****, TABLE** ***table-name***

Explanation

For a UNLOAD statement, specified field positions are not in ascending order in the field specification list of the indicated table.

System action

The utility job terminates.

User response

Specify the field positions in the ascending order in the field specification list. If a certain order of the output fields is needed, change the order of the field in the list so that the field positions are in the ascending order.

Severity

8 (error)

DSNU1217I ***csect-name*** **- CONFLICTING FIELD POSITION AND/OR LENGTH SPECIFICATION FOR FIELD** ***field-name*****, TABLE** ***table-name***

Explanation

For a UNLOAD statement, the specified field position for the indicated field caused a conflict with the previous field. This is caused either by

- The position value specified for the field is too small.
- The length specification for the previous field is too large.

System action

The utility job terminates.

User response

Specify the correct position or length parameters in the field specification list so that there are enough space for the output fields.

Severity

8 (error)

DSNU1218I ***csect-name*** **- LOGICAL RECORD LENGTH OF OUTPUT RECORD EXCEEDED THE LIMIT FOR TABLE** ***table-name***

Explanation

The maximum length of the output records exceeded the physical limit for the UNLOAD utility.

System action

The utility job terminates.

User response

Consider one or more of the following options that can reduce the length of the output record, if possible:

- Use the NOPAD option.
- Unload only the necessary fields using the field specification options.
- Specify the LENGTH option with TRUNCATE and/or STRIP options for the applicable fields.

If the above options can not be applied, you will have to use an application to unload the data from the table.

Problem determination

This problem will most likely occur when BLOB, CLOB, or DBCLOB columns are selected from a table to be unloaded.

Severity

8 (error)

DSNU1219I ***csect-name*** **- THE NUMBER OF RECORDS IN ERROR REACHED THE LIMIT** ***nnnn***

Explanation

For the UNLOAD utility, the number of records in error reached the specified MAXERR limit.

System action

The utility job terminates.

User response

Investigate the individual error message and determine the cause of the errors. The corrective action will differ by the type of the error. In certain situations, this condition may be anticipated. In this case, the total number of records unloaded before the job terminates can be adjusted by changing the MAXERR option value.

Problem determination

This problem will occur when the number of errors in the output record formatting, including data conversion errors, detected by the UNLOAD utility reached the limit specified by the MAXERR option. For each record in error, the corresponding message has been issued. The records in error will not be unloaded to the output data set. This message is issued only once, even though there can be a situation in which the number of individual error messages exceeds the specified MAXERR value. This situation occurs only when the UNLOAD utility is running in the partition parallel mode and the multiple tasks have reached the MAXERR value concurrently.

Severity

8 (error)

DSNU1220I **UNLOAD OF** ***lob-or-xml*** **FROM IMAGE COPY NOT SUPPORTED**

Explanation

For the UNLOAD utility, one or more XML, BLOB, CLOB, and/or DBCLOB columns are selected on the indicated table when the source object is an image copy data set.

System action

The utility job terminates.

User response

Specify a field selection list that does not include any XML, BLOB, CLOB, or DBCLOB column from the indicated table.

Problem determination

When the source object of the UNLOAD utility is an image copy, selection of a LOB or XML column is not supported.

Severity

8 (error)

DSNU1221I ***csect-name*** **- UNLDDN IS NOT SPECIFIED OR SPECIFIED TEMPLATE** ***template-name*** **IS INVALID FOR MULTIPLE TABLE SPACES**

Explanation

For the UNLOAD utility, the output data set specification is invalid when the source objects consist of multiple table spaces.

System action

The utility job terminates.

User response

Include an appropriate TEMPLATE statement in the unload job step that contains the table space name as a variable. If the table space is selected from different databases, the database name must also be included as a variable. Specify the template name to the UNLDDN option.

Problem determination

When the source objects of the UNLOAD utility consist of multiple table spaces, an output data set corresponding to each table space is required.

Severity

8 (error)

DSNU1222I ***csect-name*** **- TEMPLATE** ***template-name*** **SPECIFIED FOR PUNCHDDN IS INVALID FOR MULTIPLE TABLE SPACES**

Explanation

For the UNLOAD utility, the specification of output data set to store the generated LOAD statement is invalid

when the source objects consist of multiple table spaces.

System action

The utility job terminates.

User response

Include an appropriate TEMPLATE statement in the unload job step that contains the table space name as a variable. If the table space is selected from different databases, the database name must also be included as a variable. Specify the template name to the PUNCHDDN option. The TEMPLATE should be different from the one used for UNLDDN.

Problem determination

When the source objects of the UNLOAD utility consist of multiple table spaces, an output data set corresponding to each table space is required.

Severity

8 (error)

DSNU1223I ***csect-name*** **- TABLESPACE SPECIFICATION IS MISSING FOR FROMCOPY OR FROMCOPYDDN**

Explanation

For the UNLOAD utility, the FROMCOPY or FROMCOPYDDN option is used but the TEMPLATE specification is missing.

System action

The utility job terminates.

User response

Add the TABLESPACE option in the UNLOAD statement to specify the table space name of the image copy.

Problem determination

When the source objects of the UNLOAD utility is an image copy, the TABLESPACE option is required to specify the table space name of the image copy.

Severity

8 (error)

DSNU1224I ***csect-name*** **- TABLE** ***table-name*** **IS NOT IN THE TABLE SPACE** ***table-space-name***

Explanation

The indicated *table-name* given in a FROM TABLE option is not in the table space specified by the TABLESPACE option.

System action

The utility job terminates.

User response

Correct either the TABLESPACE or the FROM TABLE specification to select a table in the specified table space. If the table was dropped, remove the FROM TABLE option for the dropped table.

Problem determination

There is an unmatch between the TABLESPACE and FROM TABLE specifications or the specified table was dropped. Dropped tables are not supported by the UNLOAD utility.

Severity

8 (error)

DSNU1225I ***csect-name*** **- TABLESPACE KEYWORD IS NOT SPECIFIED. AT LEAST ONE FROM TABLE SPECIFICATION IS REQUIRED.**

Explanation

There is no TABLESPACE nor FROM TABLE specification in a UNLOAD statement. The source object for unloading can not be identified.

System action

The utility job terminates.

User response

If the TABLESPACE specification is omitted, specify at least one FROM TABLE option to identify the source object. Instead of a TABLESPACE specification, the LIST option can be used, if a LISTDEF statement defines a list of objects. When the LIST option is used, the FROM TABLE option can not be specified.

Severity

8 (error)

DSNU1226I ***csect-name*** **- THE NUMBER OF OBJECTS IS TOO LARGE**

Explanation

The number of source objects for the UNLOAD utility is too large. Overflow in some of the internal data structures occurred.

System action

The utility job terminates.

User response

Divide the UNLOAD job step into two or more job steps and, in each job step, use a LISTDEF that expands to less number of objects.

Problem determination

This problem will most likely occur when the LIST option is used and the corresponding LISTDEF definition is expanded to a large number of objects.

Severity

8 (error)

DSNU1227I ***csect-name*** **- THE CONTENT OF THE IMAGE COPY DATA SET IS INCONSISTENT WITH TABLE SPACE** ***table-space***

Explanation

For the UNLOAD utility, the data set that is specified by the FROMCOPY or the FROMCOPYDDN option references a data set that does not match the definition of the table space in the catalog.

csect-name
The name of the control section that issued the message.

table-space
Name of the table space.

System action

The utility job terminates.

User response

Perform one of the following actions:

- Specify a correct image copy data set name for the table space
- Specify the correct table space name for the image copy

In the case where the image copy was taken before a REORG where dropped columns were materialized, UNLOAD is not permitted.

Severity

8 (error)

DSNU1228I ***csect-name*** **- A ROWID COLUMN** ***column-name*****, TABLE** ***table-name*** **IS SELECTED FOR UNLOAD BUT THE PAGE SET HEADER PAGE IS MISSING IN THE SPECIFIED IMAGE COPY DATA SET**

Explanation

For the UNLOAD utility, a ROWID column is selected for unloading from an image copy, but the required information to form the ROWID can not be retrieved because the page set header page is not included in the specified image copy data set.

System action

The utility job terminates.

User response

Use the FROMCOPYDDN, instead of FROMCOPY, to specify a DD name where the first piece of copy that contain the page set header page is concatenated to the source image copy data set.

Problem determination

The problem will most likely occur when a piece of copy data set, not the first one, is specified to the FROMCOPY option.

Severity

8 (error)

DSNU1229I ***csect-name*** **- ERROR IN LOADING DICTIONARY FOR TABLE SPACE** ***table-space***

Explanation

For the UNLOAD utility, an error was detected in loading the dictionary for decompression while reading an image copy data set.

System action

The utility job terminates.

User response

If the right image copy data set is specified to the FROMCOPY or FROMCOPYDDN, it will be required to take a new image copy for the table space by running the COPY utility or using other alternative methods.

Problem determination

Possibly the image copy data set is corrupted.

Severity

8 (error)

DSNU1230I ***csect-name*** **- INCONSISTENT STRIP CHAR LENGTH FOR FIELD** ***field-name*****, TABLE** ***table-name***

Explanation

An invalid strip character was specified for the indicated field of the table.

System action

The utility job terminates.

User response

Specify the correct strip character applicable to the field.

Problem determination

For an SBCS or MIXED character field, the strip character, if specified, must be an SBCS character; for a DBCS field, it must be a DBCS character.

Severity

8 (error)

DSNU1231I ***csect-name*** **- LENGTH OF OUTPUT RECORD IS TOO LONG FOR TABLE** ***table-name***

Explanation

An output record for the indicated table exceeded the physical limit.

System action

The record in error will not be unloaded to the output data set. The UNLOAD utility continues until the total number of records in error reaches the value specified by the MAXERR option (the default is 1).

If the total number of records reaches the MAXERR value, the UNLOAD utility issues the DSNU1219I message and terminates with the return code 8.

User response

Consider the following options to reduce the size of the output records:

- Unload only the necessary fields using the field specification options.
- Specify the LENGTH option with TRUNCATE and/or STRIP options for the applicable fields.

If the above options can not be applied, you will have to use an application to unload the data from the table.

Problem determination

This message is issued only when the NOPAD option is specified in the UNLOAD statement and most likely when BLOB, CLOB, or DBCLOB columns are selected for unload from the table. It is also possible that, if the expansion of output strings occurs due to the encoding scheme specified for the output, the total length of some output records becomes longer than expected.

Severity

4 (warning)

DSNU1232I ***csect-name*** **- COMPRESSED ROW IS IGNORED BECAUSE THE DICTIONARY IS NOT AVAILABLE FOR TABLE** ***table-name***

Explanation

The UNLOAD utility encountered a compressed row when unloading the data from an image copy data set, but the dictionary for decompression has not been loaded for the table space.

csect-name
The name of the control section that issued the message.

table-name
The name of the table.

This message is issued when:

- A copy of pieces (not the first piece) of a compressed table space is specified in the FROMCOPY or FROMCOPYDDN option of the UNLOAD utility.
- The image copy data set in the FROMCOPY or FROMCOPYDDN option of the UNLOAD utility was built either by the COPY utility with the SYSTEMPAGES NO option or by the DSN1COPY utility, and the original compressed table space was filled by INSERT statements and never reorganized.

System action

The record in error is not unloaded to the output data set. The UNLOAD utility continues to unload records until the total number of records in error reaches the value specified by the MAXERR option. (The default value of this option is 1.) If the total number of records reaches the MAXERR value, the UNLOAD utility issues

message DSNU1219I and terminates with return code 8.

User response

To unload compressed rows from the copy of pieces, use the FROMCOPYDDN option to specify a DD name under which the first copy of pieces that contains the compression dictionary is concatenated.

If the problem persists, it is likely that the image copy data set was built in such a way that the data in the image copy data set cannot be unloaded. (Either the COPY utility was used with the SYSTEMPAGES NO option or the DSN1COPY utility was used, and the original compressed table space was filled by INSERT statements and never reorganized.)

This copy is not suitable for use with the UNLOAD utility. Create a new copy with the SYSTEMPAGES YES option and unload data from the new copy.

Severity

4 (warning)

Related reference

UNLOAD (Db2 Utilities)

Related information

DSNU1219I

csect-name - THE NUMBER OF RECORDS IN ERROR REACHED THE LIMIT *nnnn*

DSNU1233I ***csect-name* - DATA IS TOO LONG FOR FIELD *field-name*, TABLE *table-name***

Explanation

The space for the field in an output record is not large enough to unload the data from the corresponding column of a row in the indicated table.

If you are trying to unload tables in spanned record format, one or more of the source tables might not have LOB or XML columns.

csect-name
The name of the control section that issued the message.

field-name
The name of the field.

table-name
The name of the table.

System action

The record in error is not unloaded to the output data set. The UNLOAD utility continues until the total number of records in error reaches the value that is specified by the MAXERR option. The default MAXERR value is 1.

If the total number of records in error reaches the MAXERR value, UNLOAD issues message DSNU1219I and terminates with the return code 8.

User response

Take one of the following actions:

- If you received this message when trying to unload tables in spanned record format, ensure that all of the tables in the FROM TABLE clauses have at least one LOB or XML column. Use a separate UNLOAD statement for those tables that do not have LOB or XML columns.
- Apply appropriate values to the LENGTH or POSITION parameters in the field specification list to accommodate the data in the output records.
- Specify the TRUNCATE option for the field, if applicable.
- If the data contains leading or trailing blanks, specify the STRIP option to reduce the length of the data.

Severity

4 (warning)

Related reference

Syntax and options of the UNLOAD control statement (Db2 Utilities)

Related information

DSNU1219I

csect-name - THE NUMBER OF RECORDS IN ERROR REACHED THE LIMIT *nnnn*

DSNU1234I ***csect-name* - NUMERIC CONVERSION ERROR OCCURRED FOR FIELD *field-name*, TABLE *table-name***

Explanation

The UNLOAD utility encountered an error when it tried to convert a data of one numeric type to another.

System action

The record in error will not be unloaded to the output data set. The UNLOAD utility continues until the total number of records in error reaches the value specified by the MAXERR option (the default is 1).

If the total number of records reaches the MAXERR value, the UNLOAD utility issues the DSNU1219I message and terminates with the return code 8.

User response

To eliminate any numeric overflow error, specify the same numeric data type for the output as the base type of the columns in the table. Convert numeric types only when it is known that the range of the source data fits in the allowable range of the specified numeric type for the output.

Problem determination

This message is issued most likely when an overflow occurs in converting a data of one numeric type to another. For example, an attempt to convert an INTEGER 32768 to a SMALL INT causes an overflow.

Severity

4 (warning)

DSNU1235I ***csect-name*** **- CCSID SUBSTITUTION IS ATTEMPTED WITH NOSUBS OPTION FOR FIELD** ***field-name*****, TABLE** ***table-name***

Explanation

While the UNLOAD utility is running with the NOSUBS option, a CCSID substitution is attempted in the CCSID conversion process for the indicated field.

System action

The record in error will not be unloaded to the output data set. The UNLOAD utility continues until the total number of records in error reaches the value specified by the MAXERR option (the default is 1). If the total number of records reaches the MAXERR value, the UNLOAD utility issues the DSNU1219I message and terminates with the return code 8.

User response

If CCSID substitution should not occur, specify an appropriate CCSID that has the corresponding entries to the original CCSID, if available. To allow the default CCSID substitution, remove the NOSUBS option.

Severity

4 (warning)

DSNU1236I ***csect-name*** **- POSITION SPECIFICATION CAUSES FIELD OVERLAP FOR FIELD** ***field-name*****, TABLE** ***table-name***

Explanation

For the UNLOAD utility, the space for an output field was overlapped by the indicated field to which the POSITION parameter is specified.

System action

The record in error will not be unloaded to the output data set. The UNLOAD utility continues until the total number of records in error reaches the value specified by the MAXERR option (the default is 1). If the total number of records reaches the MAXERR value, the UNLOAD utility issues the DSNU1219I message and terminates with the return code 8.

User response

Consider the following options to eliminate this situation:

- Remove the POSITION specifications from the field specification list.
- Adjust the POSITION parameter for the field to preserve enough space for the previous fields.
- Adjust the LENGTH, possibly with the TRUNCATE option, of the previous fields, if applicable.

Problem determination

This message will be issued only when the NOPAD option is specified in the UNLOAD statement. The POSITION specification for the field caused a conflict with the positioning and/or the length of a previous field.

Severity

4 (warning)

DSNU1237I ***csect-name*** **- ERROR IN CCSID CONVERSION FOR FIELD** ***field-name*****, TABLE** ***table-name***

Explanation

The CCSID conversion process detected a code point or form exception while the UNLOAD utility was running.

System action

The record in error will not be unloaded to the output data set. The UNLOAD utility continues until the total number of records in error reaches the value specified by the MAXERR option (the default is 1). If the total number of records reaches the MAXERR value, the UNLOAD utility issues the DSNU1219I message and terminates with the return code 8.

System programmer response

Verify the contents of SYSSTRINGS. If necessary, insert a row into SYSSTRINGS for the conversion. For an SBCS translation, the row must contain a translate table or the name of a user-provided translate procedure. For a DBCS translation, the row must contain the name of a user-provided translate procedure.

User response

If the specified CCSID for output is incorrect, correct the CCSID specification. If a valid CCSID is specified, notify the system programmer.

Severity

4 (warning)

DSNU1238I **TABLE *table2* IS NOT IN SAME TABLESPACE AS TABLE *table1***

Explanation

All source tables for a single UNLOAD utility statement must be in the same table space.

System action

Utility processing terminates.

User response

Remove the FROM TABLE control statement that specifies *table2* from the current UNLOAD request. Create another UNLOAD utility statement that contains the FROM TABLE control statement for *table2* so that all source tables in a single UNLOAD request are from the same table space. Resubmit the job.

Severity

8 (error)

DSNU1239I ***csect-name* - VERSION *version-number* OBDREC WAS NOT FOUND IN OBID *object-id***

Explanation

The version information for a record that is being unloaded from an image copy is not available in the OBD or the system pages in the image copy.

csect-name
The name of the control section that issued the message.

version-number
The version number of the record in error.

object-id
The object ID of the record in error.

Unloading data from an image copy requires that the image copy data set was taken with the SYSTEMPAGES YES option on the COPY utility statement. Without the system pages, the UNLOAD utility cannot unload versioned data.

Possible causes for this error include:

- The system pages are not available in the image copy.
- The version 0 OBD information has been deleted by the MODIFY RECOVERY utility.

System action

The record that is in error is not unloaded to the output data set. The UNLOAD utility continues to process records. If the total number of records in error reaches the value that is specified by the MAXERR option, processing stops and message DSNU1219I is issued.

The default value for MAXERR is 1.

User response

If the DDL of the table, including alterations up to the time of the image copy, is available, you can rebuild the OBD information and unload the data. To rebuild OBD information:

1. Re-create the table to the state that it was in when the image copy was taken.
2. If necessary, use DSN1COPY with the IBDIXLAT option to update the DBID, PSID, and OBID information in the image copy so that it matches the new table.
3. Unload the data from the updated image copy.

Severity

4 (warning)

Related reference
UNLOAD (Db2 Utilities)
MODIFY RECOVERY (Db2 Utilities)
Related information
DSNU1219I
csect-name - THE NUMBER OF RECORDS IN ERROR REACHED THE LIMIT *nnnn*

DSNU1241I ***csect-name -utility-name* UTILITY CANNOT PROCEED BECAUSE TABLE *table-name* IS SPECIFIED IN MORE THAN ONE FROM TABLE SPECIFICATION**

Explanation

The table *table-name* cannot be specified in multiple FROM TABLE specifications.

System action

Utility processing terminates.

User response

Remove the FROM TABLE specifications for the same table. Group all WHEN control statements for the same table into a single WHEN control statement by using the OR keyword. Resubmit the job.

Severity

8 (error)

DSNU1242I ***csect-name*** **ALL KEYS OF A NON-PARTITIONED SECONDARY INDEX WILL BE SORTED.**

Explanation

During a part-level REORG, all keys of a non-partitioned secondary index are sorted before rebuilding the index. This action is controlled by the SORTNPSI keyword and the REORG_PART_SORT_NPSI subsystem parameter. When you specify SORTNPSI as YES or AUTO, all keys are sorted. When you set REORG_PART_SORT_NPSI to YES or AUTO and you do not specify SORTNPSI, all keys are sorted.

System action

Processing continues.

Severity

0 (informational)

DSNU1250I ***csect-name*** **- ERROR IN CCSID CONVERSION FOR *object-type*. SOURCE CCSID=*ccsid*, TARGET CCSID=*ccsid***

Explanation

The CCSID conversion process failed for *object-type*. The values of *object-type* and the cause of the error for each type are:

- SBCS PAD CHAR
- DBCS PAD CHAR
- VERIFICATION
- HEADER CONST
- *field-name*

System action

The utility terminates.

System programmer response

Check the SYSSTRINGS catalog table to determine whether a row exists for the CCSID conversion. If a row does not exist, and OS/390® V2R9 is installed, refer to *z/OS C/C++ Programming Guide* for additional conversions that are supported. If no conversions are available, contact your IBM service representative to request support for the conversion.

User response

If the CCSID that is specified in the utility control statement is incorrect, correct the CCSID specification. If a valid CCSID is specified, notify the system programmer.

Severity

8 (error)

DSNU1251I ***csect-name*** **- ERROR IN CCSID CONVERSION FOR *object-type* IN FIELD *field-name* OF TABLE *table-name*. SOURCE CCSID=*ccsid*, TARGET CCSID=*ccsid***

Explanation

The CCSID conversion process failed for *object-type* . The values of *object-type* and the cause of the error for each type are:

- STRIP CHAR

System action

The utility terminates.

System programmer response

Check the SYSSTRINGS catalog table to determine whether a row exists for the CCSID conversion. If a row does not exist, and OS/390 V2R9 is installed, refer to *z/OS C/C++ Programming Guide* for additional conversions that are supported. If no conversions are available, contact your IBM service representative to request support for the conversion.

User response

If the CCSID that is specified in the utility control statement is incorrect, correct the CCSID specification. If a valid CCSID is specified, notify the system programmer.

Severity

8 (error)

DSNU1252I ***csect-name*** **- PARTITION PARALLELISM IS NOT ACTIVATED FOR TABLESPACE** ***table-space-name*****. THE PARTITION VARIABLE IN THE TEMPLATE DSN WAS SPECIFIED BUT NO PARTITION IS ACTIVATED**

Explanation

A utility control statement for the UNLOAD utility contains a template name in the UNLDDN option. The template contains a variable that represents a partition number. However, the source object is either a non-partitioned table space or an image copy that does not support partition parallelism.

System action

UNLOAD processing continues. For the indicated table space, a single output data set is allocated, and the unloaded data is placed in that data set.

Severity

4 (warning)

DSNU1253I ***csect-name*** **- USER** ***user-id*** **DOES NOT HAVE THE** ***privilege-name*** **PRIVILEGE ON TABLE** ***table-name*** **IN TABLE SPACE** ***table-space-name***

Explanation

The utility could not run on the specified table, because the user did not have the required SELECT privilege.

csect-name
The name of the control section that issued the message.

user-id
The user ID.

privilege-name
The required privilege.

table-name
The name of the table that the utility attempted to process.

table-space-name
The name of the table space that contains the table.

System action

The utility terminates.

System programmer response

Grant the user the SELECT privilege on the specified table.

Severity

8 (error)

DSNU1254I ***csect-name*** **FORMAT DELIMITED REQUIRES ONE AND ONLY ONE FROM TABLE**

Explanation

UNLOAD FORMAT DELIMITED supports unloading only from a single table. FORMAT DELIMITED was specified either with:

- Multiple FROM TABLE specifications, or
- No FROM TABLE specifications, with a table space that contains more than one table.

System action

Processing terminates.

User response

Correct the UNLOAD statement and resubmit the utility.

Severity

8 (error)

DSNU1255I ***csect-name*** **UNLOAD IS NOT ALLOWED BECAUSE THE SOURCE IS MISSING THE HEADER PAGE**

Explanation

An attempt was made to unload data from a sequential copy data set that does not contain either the header page of the table space or the header page of the partition.

System action

The UNLOAD utility terminates.

Programmer response

Use an image copy data set that contains the header page.

Severity

8 (error)

DSNU1256I ***csect-name*** **- VIRTUAL STORAGE REQUIRED FOR SPANNED RECORDS EXCEEDS DEFINED LIMIT.**

Explanation

The amount of virtual storage required to process spanned records has exceeded the limit defined on the system.

csect-name
The name of the control section that issued the message.

To calculate the storage limit, multiply the number of LOB columns by the value of the LOBVALA subsystem parameter, and the number of XML columns by the value of the XMLVALA subsystem parameter, and sum the two products:

x = number of LOB columns × LOBVALA value
y = number of XML columns × XMLVALA value
limit = *x* + *y*

System action

The utility job terminates.

User response

Either modify the utility statement to reduce the size of the records or increase the amount of virtual storage allowed for spanned records processing. To increase storage limit, adjust the LOBVALA or XMLVALA values as appropriate for your environment.

Severity

8 (error)

Related reference
USER LOB VALUE STG field (LOBVALA subsystem parameter) (Db2 Installation and Migration)
USER XML VALUE STG field (XMLVALA subsystem parameter) (Db2 Installation and Migration)

DSNU1257I ***csect-name*** **- REFERENCE TO LOB OR XML DATA IN A WHEN CLAUSE IS NOT ALLOWED IF THE LOAD STATEMENT SPECIFIES FORMAT SPANNED YES.**

Explanation

A WHEN clause of a LOAD statement references data that is not in the first segment of a spanned record.

csect-name
The name of the control section that issued the message.

System action

The utility job terminates.

User response

Modify the WHEN clause to remove references to data beyond the first segment of a spanned record.

Severity

8 (error)

Related reference
LOAD (Db2 Utilities)

DSNU1258I ***csect-name*** **- ORDER OF FIELDS IS NOT VALID FOR KEYWORD SPANNED.**

Explanation

LOB and XML fields were found in an invalid location. These fields must be at the end of the field specification list for spanned records.

csect-name
The name of the control section that issued the message.

System action

The utility job terminates.

User response

Modify the field specification list.

Severity

8 (error)

DSNU1259I ***csect-name*** **- THE INPUT DATA SET DOES NOT HAVE THE ATTRIBUTE SPANNED.**

Explanation

The utility specified SPANNED YES, but the data set is not spanned.

csect-name
The name of the control section that issued the message.

System action

The utility job terminates.

User response

Modify the record format of the input data set.

Severity

8 (error)

DSNU1260I ***csect-name*** **- THE INPUT DATA SET CONTAINS RECORDS WITH VIOLATIONS - BACKOUT PROCESSING BACKED OUT** ***record-count*** **RECORDS**

Explanation

BACKOUT YES was specified and an input record contained violations because of unique index errors, referential or check constraint violations, or index evaluation errors. Violations can be detected during RELOAD, INDEXVAL, and ENFORCE phases.

csect-name
The name of the control section that issued the message.

record-count
The number of records backed out.

System action

Load processing ends. All loaded records are be backed out.

User response

Modify the records in the input data set to correct the violations.

Severity

8 (error)

Related reference
LOAD (Db2 Utilities)

DSNU1271I ***csect-name*** **REQUIRED KEYWORD NUMRECS MISSING FOR TABLE** ***table-name***

Explanation

An attempt was made to use the LOAD utility to load data into multiple tables. If any table that is to be loaded specifies the NUMRECS keyword, then all tables in the LOAD operation must specify the NUMRECS keyword.

csect-name
The name of the control section that issued the message.

table-name
The name of the table that is missing the NUMRECS keyword.

System action

Utility operation is terminated with return code 8. The tables are not loaded.

User response

Add the required keyword NUMRECS to all INTO TABLE clauses of the LOAD utility control statement, and resubmit the job.

Severity

8 (error)

Related reference
LOAD (Db2 Utilities)

DSNU1300I ***csect-name*** **MODIFY STATISTICS COMPLETED SUCCESSFULLY**

Explanation

This message reports the successful completion of the MODIFY STATISTICS utility operation.

Severity

0 (informational)

DSNU1301I ***csect-name number-deleted*** **SYSIBM.SYSCOLDIST_HIST ROWS WERE DELETED**

Explanation

This message displays the number of SYSIBM.SYSCOLDIST_HIST rows that were deleted by the MODIFY STATISTICS utility.

csect-name
The name of the control section that issued the message.

number-deleted
The number of rows that were deleted.

The rows were deleted based on the AGE or DATE criteria that the user specified.

User response

No action is required.

Severity

0 (informational)

DSNU1302I *csect-name number-deleted* **SYSIBM.SYSCOLUMNS_HIST ROWS WERE DELETED**

Explanation

This message displays the number of SYSIBM.SYSCOLUMNS_HIST rows that were deleted by the MODIFY STATISTICS utility.

csect-name
The name of the control section that issued the message.

number-deleted
The number of rows that were deleted.

The rows were deleted based on the AGE or DATE criteria that the user specified.

User response

No action is required.

Severity

0 (informational)

DSNU1303I *csect-name number-deleted* **SYSIBM.SYSINDEXES_HIST ROWS WERE DELETED**

Explanation

This message displays the number of SYSIBM.SYSINDEXES_HIST rows that were deleted by the MODIFY STATISTICS utility.

csect-name
The name of the control section that issued the message.

number-deleted
The number of rows that were deleted.

The rows were deleted based on the AGE or DATE criteria that the user specified.

User response

No action is required.

Severity

0 (informational)

DSNU1304I *csect-name number-deleted* **SYSIBM.SYSINDEXPART_HIST ROWS WERE DELETED**

Explanation

This message displays the number of SYSIBM.SYSINDEXPART_HIST rows that were deleted by the MODIFY STATISTICS utility.

csect-name
The name of the control section that issued the message.

number-deleted
The number of rows that were deleted.

The rows were deleted based on the AGE or DATE criteria that the user specified.

User response

No action is required.

Severity

0 (informational)

DSNU1305I *csect-name number-deleted* **SYSIBM.SYSINDEXSTATS_HIST ROWS WERE DELETED**

Explanation

This message displays the number of SYSIBM.SYSINDEXSTATS_HIST rows that were deleted by the MODIFY STATISTICS utility.

csect-name
The name of the control section that issued the message.

number-deleted
The number of rows that were deleted.

The rows were deleted based on the AGE or DATE criteria that the user specified.

User response

No action is required.

Severity

0 (informational)

DSNU1306I *csect-name number-deleted* **SYSIBM.SYSLOBSTATS_HIST ROWS WERE DELETED**

Explanation

This message displays the number of SYSIBM.SYSLOBSTATS_HIST rows that were deleted by the MODIFY STATISTICS utility.

csect-name
The name of the control section that issued the message.

number-deleted
The number of rows that were deleted.

The rows were deleted based on the AGE or DATE criteria that the user specified.

User response

No action is required.

Severity

0 (informational)

DSNU1307I ***csect-name number-deleted*** **SYSIBM.SYSTABLEPARTS_HIST ROWS WERE DELETED**

Explanation

This message displays the number of SYSIBM.SYSTABLEPARTS_HIST rows that were deleted by the MODIFY STATISTICS utility.

csect-name
The name of the control section that issued the message.

number-deleted
The number of rows that were deleted.

The rows were deleted based on the AGE or DATE criteria that the user specified.

User response

No action is required.

Severity

0 (informational)

DSNU1308I ***csect-name number-deleted*** **SYSIBM.SYSTABLES_HIST ROWS WERE DELETED**

Explanation

This message displays the number of SYSIBM.SYSTABLES_HIST rows that were deleted by the MODIFY STATISTICS utility.

csect-name
The name of the control section that issued the message.

number-deleted
The number of rows that were deleted.

The rows were deleted based on the AGE or DATE criteria that the user specified.

User response

No action is required.

Severity

0 (informational)

DSNU1309I ***csect-name number-deleted*** **SYSIBM.SYSTABSTATS_HIST ROWS WERE DELETED**

Explanation

This message displays the number of SYSIBM.SYSTABSTATS_HIST rows that were deleted by the MODIFY STATISTICS utility.

csect-name
The name of the control section that issued the message.

number-deleted
The number of rows that were deleted.

The rows were deleted based on the AGE or DATE criteria that the user specified.

User response

No action is required.

Severity

0 (informational)

DSNU1310I **THE IMAGE COPY FOR** ***obj-type dbname.tsname*** **DSNUM** ***dsnum*** **RESIDES ON A TAPE VOLUME BUT IS NOT PREALLOCATED VIA JCL AND TAPEUNITS IS 0**

Explanation

The specification of TAPEUNITS=0 restricts the utility from using tape units that are not preallocated via JCL.

System action

Processing stops for this object.

User response

Either change the value on the TAPEUNITS keyword and resubmit the job, or preallocate the image copy and resubmit the job.

Severity

8 (error)

DSNU1311I ***csect-name*** **OBJECT SORTING DETECTED AN ERROR DURING PROCESSING RC =** ***return-code*****, RSN =** ***reason-code***

Explanation:
An internal call to the queueing service failed.

System action:
Processing halts with return code 8.

System programmer response:
If the problem persists, contact IBM Support

DSNU1312I ***csect-name*** **PROCESSING DEFERRED FOR OBJECT** ***obj-type obj-qualifier.obj-name*****, RC =** ***return-code***

Explanation:
During parallel processing, the object *obj-qualifier.obj-name* could not be processed.

System action:
The system defers processing of the object until parallel processing is complete.

User response:
Review the messages that precede DSNU1312I in the job output. Because processing is parallel, messages for other objects that are being recovered might be mixed in with messages for this object. Look for messages that refer to the same *obj-qualifier.obj-name*.

DSNU1313I ***csect-name*** **PROCESSING DEFERRED FOR OBJECT** ***obj-type obj-qualifier.obj-name*** **BECAUSE THE NUMBER OF FULL AND INCREMENTAL COPIES EXCEEDS WHAT WAS SPECIFIED FOR TAPEUNITS**

Explanation:
During parallel processing, the object *obj-qualifier.obj-name* could not be processed because the number of image copies exceeds the number of tape drives available. The number of tape units available is controlled by the TAPEUNITS parameter of the RECOVER utility.

System action:
The system defers processing of the object until parallel processing is complete.

System programmer response:
No action is required for this job. For future recovery work, ensure that the value specified for the TAPEUNITS parameter is set to make efficient use of available hardware.

DSNU1314I ***csect-name number-deleted*** **SYSIBM.SYSKEYTARGETS_HIST ROWS WERE DELETED**

Explanation

This message displays the number of SYSIBM.SYSKEYTARGETS_HIST rows that were deleted by the MODIFY STATISTICS utility. The rows were deleted because AGE or DATE criteria were specified.

csect-name
The name of the control section that issued the message.

number-deleted
The number of rows that were deleted.

System action

Processing continues.

User response

No action is required.

Severity

0 (informational)

DSNU1315I ***csect-name number-deleted*** **SYSIBM.SYSKEYTGTDIST_HIST ROWS WERE DELETED**

Explanation

This message displays the number of SYSIBM.SYSKEYTGTDIST_HIST rows that were deleted by the MODIFY STATISTICS utility. The rows were deleted because AGE or DATE criteria were specified.

csect-name
The name of the control section that issued the message.

number-deleted
The number of rows that were deleted.

System action

Processing continues.

User response

No action is required.

Severity

0 (informational)

DSNU1316I ***csect-name*** **- THE FOLLOWING TABLESPACES ARE MISSING FROM THE RECOVERY LIST**

Explanation

The RECOVER utility has determined that a table space set (a base table space or a partition and its dependent LOB and XML table spaces) is incomplete.

csect-name
The name of the control section that issued the message.

The message header is followed by a list of all base, LOB, and XML table spaces that are not in the specified table space set.

System action

The utility job is terminated.

User response

Run the RECOVER utility with the complete list of table spaces, including the dependent LOB and XML table spaces.

Severity

8 (error)

Related reference
RECOVER (Db2 Utilities)

DSNU1317I ***csect-name*** **- POINT-IN-TIME RECOVERY IS NOT ALLOWED WHEN PENDING DEFINITION CHANGES EXIST ON TABLESPACE** ***tablespace-name***

Explanation

Point-in-time recovery was attempted on the specified table space, which has pending definition changes. The pending definition changes must be materialized before point-in-time recovery can run.

tablespace-name
The name of the table space.

System action

Utility processing is not initiated.

User response

Before running the RECOVER job, take one of the following actions:

- Execute ALTER TABLESPACE with DROP PENDING CHANGES to drop the pending definition changes on the table space.
- Run REORG TABLESPACE with SHRLEVEL REFERENCE or SHRLEVEL CHANGE to materialize the pending definition changes on the table space.

Severity

8 (error)

Related reference
ALTER TABLESPACE (Db2 SQL)
RECOVER (Db2 Utilities)
REORG TABLESPACE (Db2 Utilities)

DSNU1318I ***csect-name*** **- POINT-IN-TIME RECOVERY WITH AN IMAGE COPY THAT WAS TAKEN WITH THE SHRLEVEL CHANGE OPTION IS NOT ALLOWED ON** ***object-type object-qualifier.object-name***

Explanation

RECOVER with the TOCOPY, TOLASTCOPY, or TOLASTFULLCOPY option was run. The source for recovery was an image copy with the following characteristics:

- The image copy was taken with the SHRLEVEL CHANGE option.
- The image copy was completed prior to materialization of pending definition changes.

An image copy with this combination of characteristics is not valid as the source for recovery.

object-type
The type of object.

object-qualifier.object-name
The name of the object, as a qualified name.

System action

Utility processing is not initiated.

User response

Instead of running RECOVER with an image copy, run RECOVER with the TOLOGPOINT or TORBA option. Specify a log point that is after the point at which the image copy was completed. To determine the RBA or LRSN value when the image copy was completed:

1. Run REPORT RECOVERY on the table space.

2. Find the PIT LRSN value in the SYSCOPY record for the image copy that was used in the RECOVER job. The PIT LRSN value is the RBA or LRSN when the image copy was completed.

Severity

8 (error)

Related reference

REORG TABLESPACE (Db2 Utilities)

DSNU1319I ***csect-name*** **- POINT-IN-TIME RECOVERY IS NOT ALLOWED BECAUSE TABLE SPACE** ***database-name.tablespace-name*** **CONTAINS A CLONE TABLE**

Explanation

RECOVER was run to recover a table space with a clone table to a point in time before materialization of pending definition changes. Point-in-time recovery is not valid under these circumstances.

database-name.tablespace-name
The name of the database and table space.

System action

Utility processing is not initiated.

User response

Before running the RECOVER job, execute ALTER TABLE with DROP CLONE to drop the clone table.

Severity

8 (error)

Related reference

REORG TABLESPACE (Db2 Utilities)

DSNU1320I ***csect-name*** **- ALL PARTITIONS FOR** ***object-type object-qualifier.object-name*** **MUST BE RECOVERED TOGETHER**

Explanation

RECOVER with DSNUM *integer* was issued to recover a single partition to a point in time before materialization of pending definition changes. Recovery to a point in time before materialization of pending definition changes must be performed on all partitions of an object together.

object-type
The type of object.

object-qualifier.object-name
The name of the object, as a qualified name.

System action

Utility processing is not initiated.

User response

Take one of the following actions to recover all partitions together:

- If table-space-level image copies exist, run RECOVER without the DSNUM parameter.
- If a partition-level image copy exists for each partition, run a single RECOVER control statement for all partitions of the table space. You can do that by running a LISTDEF control statement that contains an INCLUDE list option with the PARTLEVEL parameter, to include all partitions in the table space. Then run RECOVER with that LISTDEF statement.

Severity

8 (error)

Related reference

REORG TABLESPACE (Db2 Utilities)

DSNU1321I ***csect-name*** **OPERAND FOR KEYWORD** ***utility-keyword*** **IS INVALID. REASON CODE** ***reason-code***

Explanation

In a utility control statement, the operand that is specified for the indicated keyword is invalid.

csect-name
The name of the control section that issued the message.

reason-code
The following numeric value to indicate the reason that the keyword is invalid:

1
The specified LRSN for a data-sharing environment is too low. Six-byte operands must be greater than X'00FFFFFFFFFF'. Ten-byte operands must be greater than X'0000FFFFFFFFFFFFFFFF'.

System action

Utility processing terminates.

User response

Correct the invalid operand and resubmit the utility job.

Severity

8 (error)

Related reference

Syntax and options of the RECOVER control statement (Db2 Utilities)

DSNU1350I ***csect-name*** **SYSKEYTARGETSTATS CATALOG STATISTICS FOR** ***index-name*** **KEYSEQ** ***keyseq-num*** **PARTITION** ***part-num*** **KEYCARDF =** ***cardinality*** **HIGHKEY =** ***highkey*** **HIGH2KEY =** ***high2key*** **LOWKEY=***lowkey* **LOW2KEY=***low2key*

Explanation

The RUNSTATS utility issues this message to report the statistics collected for the target key part of the partition *part-num* of an index.

cardinality
The number of distinct values of the key-target

highkey
The highest value of the key-target

high2key
The second highest value of the key-target

lowkey
The lowest value of the key-target

low2key
The second lowest value of the key-target

If the values for *highkey*, *high2key*, *low2key*, and *lowkey* are null, then the invoker of RUNSTATS is not authorized to read the table.

The message is routed to SYSPRINT.

System action

Processing continues.

User response

No action is required.

Severity

0 (informational)

Related reference

Statistics used for access path selection (Db2 Performance)
RUNSTATS (Db2 Utilities)
SYSKEYTARGETSTATS catalog table (Db2 SQL)

DSNU1351I ***csect-name*** **SYSKEYTARGETS CATALOG STATISTICS FOR** ***index-name*** **KEYSEQ** ***keyseq-num*** **KEYCARDF =** ***cardinality*** **HIGH2KEY =** ***high2key*** **LOW2KEY=** ***low2key***

Explanation

The RUNSTATS utility issues this message to report the statistics collected for the key-target of an index.

cardinality
The number of distinct values of the key-target

high2key
The second highest value of the key-target

low2key
The second lowest value of the key-target

If the values for *high2key* and *low2key* are null, then the invoker of RUNSTATS is not authorized to read the table.

The message is routed to SYSPRINT.

System action

Processing continues.

User response

No action is required.

Severity

0 (informational)

Related reference

Statistics used for access path selection (Db2 Performance)
RUNSTATS (Db2 Utilities)
SYSKEYTARGETS catalog table (Db2 SQL)

DSNU1352I ***csect-name*** **SYSKEYTGTDISTSTATS CATALOG STATISTICS FOR** ***index-name*** **KEYSEQ** ***keyseq-num*****,** ***keyseq-num*****, ...PARTITION** ***part-num*** **CARDINALITY =** ***cardinality*** **FREQUENCY KEYVALUE =** ***frequency*** **X'***hex_string***'** ***frequency*** **X'***hex_string***' ... ...** ***frequency*** **X'***hex_string***'**

Explanation

The RUNSTATS utility issues this message to report the statistics collected for the key column *keyseq-num* partition *part-num*. If more than one *keyseq-num* are listed, then the statistics collected and the expression values reported represent the concatenation of those key columns.

The value of CARDINALITY is the number of distinct values for the listed *keyseq-num*. This statistic appears only if the KEYCARD option was specified.

The values under FREQUENCY are the same as those that are inserted into the Db2 catalog. Consider each frequency as a four-digit number with an implied decimal point two places to the left of the final digit. The resulting number is the percentage of total rows in the table that contain a particular value for the named index key columns.

Frequency is associated with the occurrence of a single value which is listed under KEYVALUE.

Frequencies for the MOST frequent values are collected by default or if the FREQVAL ... MOST options are specified and given a COUNT value greater than zero.

Frequencies for the LEAST frequent values are collected, if the FREQVAL ... LEAST options are specified and given a COUNT value greater than zero.

Frequencies for the MOST and LEAST frequent values are collected, if the FREQVAL ... BOTH options are specified and given a COUNT value greater than zero.

If the default is taken, then the ten most frequently occurring values, plus the lowest and highest values in the partition (if not already included in the ten greatest frequencies), are reported in descending order of frequency.

If fewer than ten values appear, then there are fewer than ten distinct values in the index.

If no values appear, then the values are uniformly distributed.

If frequencies appear but key column values do not, then the invoker of RUNSTATS is not authorized to read the table. Message DSNU619I is issued to identify the table.

The message is routed to SYSPRINT.

System action

Processing continues.

User response

No action is required.

Severity

0 (informational)

Related reference

Statistics used for access path selection (Db2 Performance)

RUNSTATS (Db2 Utilities)

SYSKEYTGTDISTSTATS catalog table (Db2 SQL)

Related information

DSNU619I

csect-name - USER *auth_id* DOES NOT HAVE PRIVILEGE ON TABLE *table_name*

DSNU1353I ***csect-name* SYSKEYTGTDIST CATALOG STATISTICS FOR *index-name* KEYSEQ *keyseq-num*, *keyseq-num*,...PARTITION *part-num* CARDINALITY= cardinality FREQUENCY KEYVALUE *frequency* X'*hex_string*' *frequency* X'*hex_string*' ... ... *frequency* X'*hex_string*'**

Explanation

The RUNSTATS utility issues this message to report the statistics collected for the indexed key column *keyseq-num*. If more than one *keyseq-num* are listed, then the statistics collected and the expression values reported represent the concatenation of those key columns.

The value of CARDINALITY is the number of distinct values for the listed key columns. This statistic appears only if the KEYCARD option was specified.

The values under FREQUENCY are the same as those that are inserted into the Db2 catalog. Consider each *frequency* as a four-digit number with an implied decimal point that is two places to the left of the final digit. The resulting number is the percentage of total rows in the table that contain a particular value for the named index key columns.

Frequency is associated with the occurrence of a single value which is listed under KEYVALUE.

When FREQVAL...MOST and a COUNT value greater than zero are specified, or if frequent values are collected by default, the frequencies for the most frequently occurring values are collected.

When FREQVAL...LEAST and a COUNT value greater than zero are specified, the frequencies for the least frequently occurring values are collected.

When FREQVAL...BOTH and a COUNT value greater than zero are specified, the frequencies for the most and least frequently occurring values are collected.

If the default is taken, then the ten most frequently occurring values are reported in the descending order of frequency.

If fewer than ten values appear, then there are fewer than ten distinct values in the index.

If no values appear, then the values are uniformly distributed.

If frequencies appear, but key columns do not, then the invoker of RUNSTATS is not authorized to read the table. Message DSNU619I is issued to identify the table.

This message is routed to SYSPRINT.

System action

Processing continues.

User response

No action is required.

Severity

0 (informational)

Related reference

Statistics used for access path selection (Db2 Performance)

RUNSTATS (Db2 Utilities)

SYSKEYTGTDIST catalog table (Db2 SQL)

DSNU1354I **KEYWORD *keyword-name* IS NOT SUPPORTED FOR XML OBJECTS. THE KEYWORD IS IGNORED**

Explanation

The identified keyword *keyword-name* does not apply to XML objects. The use of KEYWORD *keyword-name* is ignored when specified for XML objects.

System action

The keyword is ignored and the utility processing continues.

Severity

0 (informational)

Related concepts

Collection of statistics on XML objects (Db2 Utilities)

DSNU1355I ***csect-name* SYSKEYTGTDISTSTATS CATALOG HISTOGRAM STATISTICS FOR *index-name* KEYSEQ *keyseq-num*,*keyseq-num*,... PARTITION *part-num* QUANTILE *quan-num* LOWVALUE= X'*hex_string*' HIGHVALUE= X'*hex_string*' CARDF = *cardinality* FREQUENCYF= *frequency***

Explanation

The RUNSTATS utility issues this message to report the histogram statistics collected for the indexed key column for each quantile, as indicated by *quan-num* and each partition, as indicated by *part-num*. If more than one key column is listed, then the statistics collected represent the concatenation of those key columns.

When a value of 1 is specified for NUMCOLS or for default histogram processing, LOWVALUE and HIGHVALUE represent the first key expression value low bound and high bound for each quantile range. If a value greater than 1 is specified for NUMCOLS, then the LOWVALUE and HIGHVALUE represent the concatenation of the key expressions.

cardinality represents the number of distinctive values in each quantile. If more than one key column is listed, then *cardinality* represents the number of distinctive combinations of that KEYSEQ group in each quantile.

frequency represents the percentage of rows in each quantile.

If the total number of distinctive values for that KEYSEQ, or KEYSEQ group, is less than the specified number of quantiles, then the quantiles collected are up to the number of distinctive values.

This message is routed to SYSPRINT.

System action

Processing continues.

User response

No action is required.

Severity

0 (informational)

Related reference

Statistics used for access path selection (Db2 Performance)

RUNSTATS (Db2 Utilities)

SYSKEYTGTDISTSTATS catalog table (Db2 SQL)

DSNU1356I ***csect-name* SYSKEYTGTDIST CATALOG HISTOGRAM STATISTICS FOR *index-name***

KEYSEQ *keyseq-num*, *keyseq-num*,...QUANTILE *quan-num* LOWVALUE=X'*hex_string*' HIGHVALUE= X'*hex_string*' CARDF = *cardinality* FREQUENCYF= *frequency*

Explanation

The RUNSTATS utility issues this message to report the histogram statistics collected for the indexed key column for each quantile, as indicated by *quan-num*. If more than one key column is listed, then the statistics collected represent the concatenation of those key columns.

For single indexed KEYSEQ, LOWVALUE, and HIGHVALUE columns, each column represents the key column value low bound and high bound for each quantile range. If more than one key column is listed, then the LOWVALUE and HIGHVALUE represent the concatenation of those KEYSEQ values.

cardinality represents the number of distinctive values in each quantile. If more than one key column is listed, *cardinality* represents the number of distinctive combinations of that KEYSEQ group in each quantile.

frequency represents the percentage of rows in each quantile.

If the total number of distinctive values for that KEYSEQ is less than the specified number of quantiles, then the quantiles collected are up to the number of distinctive values.

This message is routed to SYSPRINT.

System action

Processing continues.

User response

No action is required.

Severity

0 (informational)

Related reference

Statistics used for access path selection (Db2 Performance)

RUNSTATS (Db2 Utilities)

SYSKEYTGTDIST catalog table (Db2 SQL)

DSNU1357I THE STATS PROFILE FOR TABLE table-name HAS BEEN SET IN SYSTABLES_PROFILES.

Explanation

The statistics profile for the table has been set in the SYSTABLES_PROFILE catalog table.

table-name
The name of the table.

System action

Execution of the job step continues.

User response

No action is required.

Severity

0 (informational)

DSNU1358I THE STATS PROFILE FOR TABLE *table-name* HAS BEEN UPDATED IN SYSTABLES_PROFILES.

Explanation

The profile for the table has been updated in the SYSTABLES_PROFILE catalog table.

table-name
The name of the table.

System action

Execution of the job step continues.

User response

No action is required.

Severity

0 (informational)

DSNU1360I THE STATS PROFILE FOR TABLE *table-name* HAS BEEN DELETED IN SYSTABLES_PROFILES.

Explanation

The profile for the table has been deleted from the SYSTABLES_PROFILE catalog table.

table-name
The name of the table.

System action

Execution of the job step continues.

User response

No action is required.

Severity

0 (informational)

DSNU1361I THE STATS PROFILE WITH STATSTIME = *timestamp* FOR TABLE *table-name* HAS BEEN USED.

Explanation

The profile that is identified by the indicated STATSTIME timestamp has been used for the table.

timestamp
The STATSTIME timestamp.

table-name
The name of the table.

System action

Execution of the job step continues.

User response

No action is required.

Severity

0 (informational)

DSNU1362I THE OBJECT *schema-name.name* IN THE STATS PROFILE DOES NOT EXIST.

Explanation

RUNSTATS was executed with USE PROFILE, but the schema does not exist in the profile. The object might have been dropped.

schema-name.name
The name of the object that does not exist.

System action

Execution of the job step stops.

User response

You can reset the profile in SYSTABLES_PROFILE for the available objects.

If the statistics profile has references to indexes that have been deleted, replace the profile:

1. Execute RUNSTATS with DELETE PROFILE to delete the invalid profile.
2. Execute RUNSTATS with SET PROFILE set a new valid profile in the SYSTABLES_PROFILES catalog table.

Severity

8 (error)

DSNU1363I THE STATS PROFILE FOR TABLE *table-name* NOT FOUND.

Explanation

RUNSTATS was executed with the option to use, update, or delete a profile, but no profile was found for the table.

The statistics profile for the specified table might not exist because the table was dropped.

table-name
The name of the table.

System action

Execution of the job step stops.

User response

Verify that the table exists. If it has been dropped, remove it from the RUNSTATS utility statement.

Execute RUNSTATS TABLESPACE TABLE SET PROFILE to set the profile for the table indicated by *table-name*.

If the table was dropped, remove the table specification for the dropped table from the RUNSTATS utility control statement.

Severity

8 (error)

Related concepts
Statistics profiles (Db2 Performance)
Related reference
RUNSTATS (Db2 Utilities)

DSNU1365I THE STATS PROFILE FOR TABLE *table-name* IS INVALID.

Explanation

RUNSTATS TABLESPACE TABLE *table-name* USE PROFILE executed, but the profile specified for the table is invalid. No statistics were collected for the table.

table-name
The name of the table.

System action

Execution of the job step stops.

User response

Execute RUNSTATS TABLESPACE TABLE SET PROFILE to set the profile for the table indicated by *table-name*.

Severity

8 (error)

DSNU1368I PARSING STATS PROFILE FOR TABLE *table-name*

Explanation

The parsing of STATS PROFILE for the indicated table has started.

table-name
The name of the table.

This message is issued during the execution of RUNSTATS TABLESPACE TABLE USE PROFILE.

System action

Execution of the job step continues.

User response

No action is required.

Severity

0 (informational)

DSNU1369I PARSING STATS FOR TABLE *table-name* COMPLETED.

Explanation

The parsing of STATS PROFILE for the indicated table is complete.

table-name
The name of the table.

This message is issued during the execution of RUNSTATS TABLESPACE TABLE USE PROFILE.

System action

Execution of the job step continues.

User response

No action is required.

Severity

0 (informational)

DSNU1370I NO EXISTING STATISTICS AVAILABLE FOR TABLE *table-name*.

Explanation

No statistics were found in the catalog tables for the specified table.

table-name
The name of the table.

System action

Execution of the utility job set terminates.

User response

No action is required.

Severity

8 (error)

DSNU1371I INDEX KEYWORD CANNOT BE SPECIFIED WITH USE PROFILE.

Explanation

The INDEX keyword cannot be used with RUNSTATS TABLESPACE TABLE USE PROFILE.

System action

Execution of the job step stops.

User response

Remove either the INDEX keyword or the USE PROFILE keywords and resubmit the RUNSTATS job.

Severity

8 (error)

DSNU1373I PAGE SAMPLING NOT DONE FOR TABLE SPACE *space-name*.

Explanation

The TABLESAMPLE keyword cannot be used with RUNSTATS TABLESPACE TABLE if the table space contains multiple tables.

space-name
The name of the table space.

When RUNSTATS TABLESPACE TABLE is executed on a multi-table table space or a table space that is segmented and not partitioned, the TABLESAMPLE keyword is not used. Instead, all pages are scanned to collect statistics.

System action

Execution of the job step continues.

User response

No action is required.

Severity

4 (warning)

DSNU1374I **SAMPLE SIZE USED : ROWS = *rows*, PAGES=*pages*, SAMPLE RATE USED = *sample-rate*, REPEATABLE = *seed-value*.**

Explanation

This message provides information about the sample used by the RUNSTATS utility in the execution of RUNSTATS TABLESPACE TABLE TABLESAMPLE SYSTEM.

rows
The number of table rows used in the sample.

pages
The number of pages used in the sample.

sample-rate
The sampling rate, which is a percentage of pages used compared to the number of pages in the table.

seed-value
An integer value that is used to determine which pages to include in the sample.

System action

Execution of the job continues.

User response

No action is required.

Severity

0 (informational)

DSNU1375I **NO ROWS SAMPLED FOR TABLE SPACE *table-space-or-partion***

Explanation

One of the following situations occurred for RUNSTATS with the TABLE TABLESAMPLE SYSTEM keyword when it was run on a populated table:

- The specified sampling rate was too small.
- If TABLE SAMPLE SYSTEM AUTO was specified, no rows were sampled for the partition.
- If a sampling rate was specified, the partition was skipped because it contained too few pages with data rows for the specified sampling rate.

table-space-or-partion
The name of a table space, or a partition identified by the table space name followed by PARTITION *part-num* , where *part-num* is the partition number.

System action

Processing continues.

User response

Run RUNSTATS again with the SAMPLE keyword for the table space or partition that was identified by *table-space-or-partion*.

If the original RUNSTATS job specified a sampling rate for the TABLESAMPLE SYSTEM keyword other than AUTO, consider increasing the sampling rate before you submit the original RUNSTATS job again.

Severity

4 (warning)

DSNU1376I **PROFILE_TEXT IN SYSTABLES_PROFILES ROW FOR TABLE *creator.table* IS *profile-value***

Explanation

This informational message lists the statistics profile that the utility is to use for the specified table.

creator.table
The qualified name of the table to which the profile applies.

profile-value
The profile that the utility retrieved from the PROFILE_TEXT column of the SYSTABLES_PROFILES catalog table.

System action

Processing continues.

User response

Examine the job output to determine if you need to change the profile. To correct a profile:

1. Execute RUNSTATS with DELETE PROFILE to delete the profile
2. Execute RUNSTATS with SET PROFILE and specify the corrected options to set the profile.

Severity

0 (informational)

Related concepts

Statistics profiles (Db2 Performance)

Related tasks

Creating statistics profiles (Db2 Performance)

Collecting statistics by using statistics profiles (Db2 Performance)

DSNU1378I INDEX NAME *index-name* IN PROFILE DOES NOT SPECIFY THE CREATOR NAME

Explanation

The profile text from SYSTABLES_PROFILES contains an index name without the creator name. All index names in profile text must be fully qualified with the creator name.

index-name
The name of the index.

PROFILE functions cannot be executed until syntax errors in the profile have been corrected.

System action

Utility processing is terminated.

User response

Either add the creator name for the index or delete the profile.

To add the creator name, use either:

- RUNSTATS UPDATE PROFILE
- SQL UPDATE

To delete the profile, use either:

- RUNSTATS DELETE PROFILE
- SQL DELETE

Severity

8 (error)

Related reference

RUNSTATS (Db2 Utilities)

DELETE (Db2 SQL)

UPDATE (Db2 SQL)

DSNU1379I INVALID KEYWORD *keyword* IN PROFILE

Explanation

A profile contains a keyword that is not allowed.

keyword
The invalid keyword.

System action

The executing utility job step is terminated. Message DSNU1368I is issued.

User response

Remove all invalid keywords from the profile and rerun the utility. Message DSNU1368I identifies the profile that contains the error.

Severity

8 (error)

Related information

DSNU1368I

PARSING STATS PROFILE FOR TABLE *table-name*

DSNU1380I *csect-name table-name* CATALOG ACCESSPATH STATISTICS RESET FOR *object-name* SUCCESSFUL

Explanation

The access path statistics for the specified object were reset successfully in the specified catalog table.

csect-name
The name of the control section that issued the message.

table-name
The name of the catalog table that contained the statistics that were reset.

object-name
The name of the object for which access path statistics were reset.

System action

Processing continues.

User response

No action is required.

Severity

0 (informational)

Related tasks

Resetting access path statistics (Db2 Utilities)

Maintaining Db2 database statistics (Db2 Performance)

Related reference

Db2 catalog tables (Db2 SQL)

Statistics used for access path selection (Db2 Performance)

DSNU1381I ***csect-name*** **MATCHING SYSSTATFEEDBACK ROWS MIGHT NOT BE DELETED, REASON:** ***reason-code***

Explanation

The RUNSTATS utility removes SYSIBM.SYSSTATFEEDBACK table rows that match the statistics that it collects. Some applicable rows might not have been deleted from the SYSSTATFEEDBACK table for the specified reason. The most likely cause is contention on the SYSSTATFEEDBACK table.

reason-code
A numeric value that indicates the reason for the failure.

System action

Processing continues. Some rows might remain in SYSIBM.SYSSTATFEEDBACK for statistics that were captured by this execution of the RUNSTATS utility.

User response

You can leave the rows not deleted by RUNSTATS in SYSIBM.SYSSTATFEEDBACK. These rows are deleted by the next successful execution of RUNSTATS that collects those statistics. Rows can also be manually deleted from SYSIBM.SYSSTATFEEDBACK.

If this message occurs repeatedly, see the specified *reason-code* to determine the cause. If indicated by the *reason-code*, check for contention on catalog table SYSIBM.SYSSTATFEEDBACK.

DSNU1382I **THE STATS PROFILE FOR TABLE** ***table-name*** **DOES NOT EXIST. DEFAULT PROFILE STATS COLLECTED.**

Explanation

A utility was run with the USE PROFILE option, but no profile exists for the indicated table. The utility is to use the default statistics profile: COLUMN ALL INDEX ALL.

table-name
The name of the table.

System action

Processing continues.

User response

If no additional statistics are required, no action is necessary. If more statistics are needed, create a statistics profile for the table that is indicated by *table-name*, and run the utility with the USE PROFILE option again.

Severity

4 (warning)

Related concepts
Statistics profiles (Db2 Performance)
Related tasks
Creating statistics profiles (Db2 Performance)
Collecting statistics by using statistics profiles (Db2 Performance)

DSNU1384I **INVALID CATALOG DATA FOUND FOR COLUMN** ***column-name*** **IN TABLE** ***creator*****.*****table-name*****.**

Explanation

Invalid catalog data was found in the SYSIBM.SYSCOLSTATS catalog table for the named table.

column-name
The name of the column that is associated with the invalid catalog table data.

creator
The identifier of the creator of the table that is associated with the invalid catalog table data.

table-name
The name of the table that is associated with the invalid catalog table data.

System action

The utility abends.

User response

Correct the data in the catalog table, or delete the rows in the SYSCOLSTATS table and use the RUNSTATS utility or inline statistics to collect statistics at the table space or table level, instead of at the partition level.

Severity

8 (error)

Related tasks
Collecting statistics by using Db2 utilities (Db2 Performance)
Related reference
SYSCOLSTATS catalog table (Db2 SQL)

DSNU1387I **DATA SORT FOR SINGLE COLUMN COLGROUPS AVOIDED.**

Explanation

During collection of statistics, a data sort was avoided for a single-column column group that was defined with the COLGROUP option.

System action

Execution of the job continues.

User response

No action is required.

Severity

0 (informational)

Related tasks

Collecting statistics by using Db2 utilities (Db2 Performance)

Related reference

SYSCOLSTATS catalog table (Db2 SQL)

DSNU1388I ***csect-name*** **COLGROUP DATA SORT REQUIRED. ESTIMATED SPACE REQUIRED =** ***space-value*** **MB, SPACE SPECIFIED BY THE** ***spacevar*** **PARAMETER =** ***storage-limit-value*** **MB**

Explanation

When statistics were collected on a single-column column group, a data sort was performed by a sort program. Not enough memory was available to avoid the sort.

Statistics were collected either by the RUNSTATS utility or inline by another utility.

csect-name
The name of the control section that issued the message.

space-value
The estimated storage, in MB, that is needed for the column group sort. This value exceeds *storage-limit-value*.

space-value is a Db2 estimate that might be higher than the amount of space that is actually needed for the sort. The higher the number of distinct values in a single-column column group, the more space that is needed for the sort. If RUNSTATS has never been executed on this column, no statistics exist to help Db2 determine the number of distinct values in the column that need to be sorted. Without those statistics, Db2 assumes a default amount of storage, which might be more than required for low-cardinality columns. Subsequent RUNSTATS jobs benefit from the existence of prior statistics.

spacevar
The source of *storage-limit-value* that Db2 used for this utility job:

ZPARM
The STATCLGSRT subsystem parameter

KEYWORD
The STATCLGMEMSRT option in the utility statement

storage-limit-value
The amount of memory, in MB, that the utility can use for sorting records for the column group. This value is specified by *spacevar*.

System action

Execution of the job continues.

User response

If you have enough storage available, consider increasing the value of STATCLGSRT or STATCLGMEMSRT to avoid external sorts in the future.

If this utility job is the first time that statistics were collected on the column that is specified for COLGROUP, leave the value of STATCLGSRT or STATCLGMEMSRT as is. The next time that you collect statistics, the estimated amount of storage (*space-value*) might be lower.

Severity

4 (warning)

Related tasks

Collecting statistics by using Db2 utilities (Db2 Performance)

Related reference

STATISTICS COLGROUP DATA SORT STG LIMIT field (STATCLGSRT subsystem parameter) (Db2 Installation and Migration)

RUNSTATS TABLESPACE syntax and options (Db2 Utilities)

DSNU1389I ***csect-name*** **- CATALOG STATISTICS NOT SUPPORTED FOR** ***index-type*** **INDEX** ***creator.index-name***

Explanation

The target objects specified for the utility include an index type that is not supported for catalog statistics collection, such as spatial indexes. The utility skips

collecting statistics for the specified index type and continues collecting statistics for other index types.

csect-name
The name of the control section that issued the message.

index-type
The type of index.

creator
The creator of the index.

index-name
The name of the index specified in the utility control statement.

System action

Processing continues.

User response

No action is required.

Severity

4 (warning)

Related tasks

Collecting statistics by using Db2 utilities (Db2 Performance)

DSNU1400I *csect-name* - COPYTOCOPY UTILITY NOT SUPPORTED FOR *object-type object-qualifier.object-name* DSNUM *n*

Explanation

The COPYTOCOPY utility cannot make copies of any of the following objects:

- Table spaces DSNDB01.SYSUTILX, DSNDB01.DBD01, DSNDB06.SYSCOPY, or DSNDB01.SYSDBDXA, or any of their indexes.
- An image copy that was taken by using the COPY utility with the CONCURRENT option.

csect-name
The name of the control section that issued the message.

object-type
The type of object.

object-qualifier.object-name
The qualified object name.

n
The number of the partition or data set.

System action

Processing stops for this object. If the utility job step includes an OPTIONS control statement with the EVENT(ITEMERROR,SKIP) option, COPYTOCOPY processes the next item in the list.

User response

If the unsupported object is a catalog or directory object, use another method to make all of the image copies for this object.

If the unsupported object is an image copy that was made with the CONCURRENT option, make a primary local image copy by running the COPY utility without the CONCURRENT option. Then, rerun COPYTOCOPY to make more image copies.

Severity

8 (error)

Related concepts

Multiple image copies (Db2 Utilities)
Page set and data set copies (Db2 Administration Guide)

Related reference

COPYTOCOPY (Db2 Utilities)
COPY (Db2 Utilities)

DSNU1401I *csect-name* - UNABLE TO LOCATE IMAGE COPY FOR *obj-type obj-qual.obj-name* DSNUM *n*

Explanation

One of the following conditions prompted this error code:

- The COPYTOCOPY utility attempted to make additional image copies from the referenced object. However, SYSIBM.SYSCOPY does not contain a record of the referenced object.
- UNLOAD utility could not find a record in SYSIBM.SYSCOPY for the image copy data set that was requested.

System action

Processing halts for this object.

User response

Make a primary local image copy by running the COPY utility, then run COPYTOCOPY to make additional image copies.

Severity

8 (error)

DSNU1402I ***csect-name* - *copy-type* FOR *obj-type obj-qual.obj-name* DSNUM *n* WITH START_RBA *rba* ALREADY EXISTS**

Explanation

COPYTOCOPY attempted to make an image copy that already exists.

System action

The utility does not make the image copy for the specified object type. COPYTOCOPY makes the remaining types of image copies. If there is a list of objects to be copied, COPYTOCOPY processes the next object in the list.

User response

Run the REPORT utility to determine the image copy types that you need. Modify your COPYTOCOPY job, and rerun it as needed.

Severity

4 (warning) or 8 (error)

Related concepts

How RBA and LRSN values are displayed (Db2 Administration Guide)

DSNU1403I ***csect-name* - *copy-type* DATA SET *dsn* WITH START_RBA *rba* IS IN USE BY COPYTOCOPY FOR *obj-type obj-qual.obj-name* DSNUM *n***

Explanation

The COPYTOCOPY utility issues this message before it opens an image copy data set and begins the copying process.

System action

COPYTOCOPY processing continues.

Severity

0 (informational)

Related concepts

How RBA and LRSN values are displayed (Db2 Administration Guide)

DSNU1404I ***csect-name* - COPYTOCOPY PROCESSING COMPLETED FOR *obj-type obj-qual.obj-name* DSNUM *n* ELAPSED TIME = *elapsed time* NUMBER OF PAGES COPIED = *n***

Explanation

COPYTOCOPY issues this message at the normal completion of an object. The time that elapsed since the beginning of processing the object to its completion was *hh* hours, *mm* minutes, and *ss* seconds.

System action

The COPYTOCOPY utility completed normally for this object. Processing continues.

Severity

0 (informational)

DSNU1405I ***csect-name* - *site-type* SITE PRIMARY IMAGE COPY DOES NOT EXIST FOR *obj-type obj-qual.obj-name* DSNUM *n***

Explanation

The COPYTOCOPY utility attempted to make a backup image copy for the site, but the primary image copy does not exist.

System action

The utility cannot make the site backup copy. If the utility job includes an OPTIONS control statement with the EVENT(ITEMERROR,SKIP) option, COPYTOCOPY processes the next item on the list.

User response

Modify your COPYTOCOPY job, COPYDDN or RECOVERYDDN option, to include the ddname for the primary copy.

Severity

8 (error)

Related concepts

How RBA and LRSN values are displayed (Db2 Administration Guide)

DSNU1406I ***csect-name* - COPYTOCOPY COMPLETED. ELAPSED TIME = *elapsed_time***

Explanation

Db2 issues this message at the normal completion of the COPYTOCOPY utility. The time that elapsed since the beginning of the COPYTOCOPY utility to its completion was *hh* hours, *mm* minutes, and *ss* seconds.

System action

Processing continues to the next utility statement in the utility job step, if any. If not, the utility job step halts, and the UTILID of the utility job step becomes available for reuse.

Severity

0 (informational)

DSNU1407I ***csect-name*** **- MISMATCH BETWEEN THE NUMBER OF PAGES READ=*count* AND THE NUMBER OF PAGES ORIGINALLY COPIED=*count* FOR INPUT DATA SET *dsname* OBJECT NAME *obj-type obj-qual.obj-name* DSNUM *n***

Explanation

The COPYTOCOPY or RECOVER utility issues this message when it detects that the number of pages read from the input image copy does not match the original number of pages copied by the COPY utility. The utility retrieves the number of pages originally copied from the COPYPAGESF column of the SYSIBM.SYSCOPY record for the input image copy data set.

System action

The COPYTOCOPY utility terminates processing of this object. The RECOVER utility attempts to continue by falling back to the previous full image copy, if any. If the utility job step includes an OPTIONS control statement with the EVENT(ITEMERROR,SKIP) option, COPYTOCOPY processes the next item in the list.

User response

Report to IBM Center. Provide output of COPYTOCOPY job, the data set referenced in the message, and run REPORT utility on the object and provide its output.

Severity

8 (error)

DSNU1408I ***csect-name*** **- SOURCE DATA SET *dsname* DOES NOT MATCH *obj-type obj-qual.obj-name* DSNUM *n***

Explanation

The COPYTOCOPY or RECOVER utility issues this message when the DBID or PSID of the source data set does not match the DBID or PSID of the table space or index space for which the copy is made. This error can occur if the data set was reused.

The UNLOAD utility displays this message when no records were UNLOADED from an image copy data set because the OBID for the tables did not match the information in the DBD. This can occur if the tables in the table space were dropped and re-created after taking the image copy.

The COPY utility issues this message when the DBID or PSID of the header page of the target object does not match the information in the DBD. In this case, the source data set dsname will be omitted from the message.

System action

RECOVER attempts to continue processing by falling back to the previous full image copy, if any.

COPYTOCOPY searches for the next available image copy data set with the same START_RBA value as the START_RBA value registered in SYSIBM.SYSCOPY for dsname. If COPYTOCOPY finds a data set, it uses that data set. Otherwise, COPYTOCOPY issues message DSNU1401I.

The UNLOAD utility completes with reason-code four.

If FROMCOPY is specified, processing of this object halts. COPY fails with RC8 and an image copy is not created.

User response

Determine why the data set was reused for the image copy data set that is registered in SYSIBM.SYSCOPY.

If FROMCOPY is specified, correct the COPYTOCOPY utility control statement. Specify a source data set that is an image copy of the table space or index space for which you want additional image copies.

If this message was received for COPY, try to determine how the header page of the object became corrupted, and fix it using the REPAIR utility, if possible. Otherwise, recover the object using a good copy.

If this message was received for UNLOAD, specify a source data set that is an image copy of the table space taken with the current table definitions.

Severity

4 (warning) or 8 (error)

DSNU1409I ***csect-name* - *ttttt* ERRORS ON DATA SET NAME=*dsname obj-type obj-qual.obj-name* DSNUM *n***

Explanation

Db2 detected I/O errors on the named object. *ttttt* is either 'READ' or 'WRITE'.

System action

If FROMCOPY is specified, processing is terminated. Otherwise, processing will continue. The utility will attempt to use the next available image copy data set that matches COPYTOCOPY job specification with the same START_ RBA as the data set named in error. If it fails to find one, processing of this object is terminated.

User response

An IOS (I/O subsystem) message might be included on the MVS console SYSLOG indicating the type of I/O error that occurred. If an IOS message was issued, follow the Problem Determination directions for the message.

Severity

4 (warning)

DSNU1410I ***csect-name* - INCREMENTAL IMAGE COPY DISALLOWED FOR *obj-type obj-qual.obj-name* DSNUM *n*. FULL IMAGE COPY WILL BE USED**

Explanation

An incremental image copy is disallowed for the specified object type. The utility ignores the request, and creates a full image copy if available.

System action

The system treats the request to copy an incremental image copy as a request to copy a full image copy.

User response

The capacity of the target image copy data set may not be sufficient if its size was established assuming an incremental image copy. If this condition occurs, halt the utility and resubmit the job step with the appropriate size.

Severity

4 (warning)

DSNU1411I ***csect-name* - *ut_name* DOES NOT SUPPORT RESTART(PHASE). PHASE CHANGED TO CURRENT.**

Explanation

This utility does not support the RESTART(PHASE).

System action

The utility overrides RESTART(PHASE) with RESTART(CURRENT).

Severity

0 (informational)

DSNU1420I ***csect-name* SET *status* OPERATION SUCCESSFUL**

Explanation

This message reports the successful completion of the REPAIR SET TABLESPACE utility operation.

csect-name
The name of the control section that issued the message.

***status* PRO**
REPAIR SET TABLESPACE PRO was specified, and the Persistent Read Only (PRO) restricted status has been turned on for the specified table space partition.

***status* NOPRO**
REPAIR SET TABLESPACE NOPRO was specified, and the Persistent Read Only (PRO) restricted status has been turned off for the specified table space partition.



Warning: Do not remove the PRO restricted status without the consent of the Db2 system administrator or database administrator, because updates to the partition might cause data loss.

System action:
The REPAIR utility completed normally.

User response:
No action is required.

Severity

0 (informational)

DSNU1421I ***csect-name* TABLESPACE *object-type object-qualifier.object-name* PARTITION *part* IS IN PRO RESTRICTED STATE**

Explanation
This message is issued when:

- The REPAIR utility set the Persistent Read Only (PRO) restricted status.
- Read-only operations by a utility occurred on a partition in PRO restricted status.

csect-name
The name of the control section that issued the message.

object-type
The type of object.

object-qualifier.object-name
The name of the object, as a qualified name.

part
The partition number for a partitioned table space.

System action:
Utility processing on the object completed normally.

User response:
No action is required. Do not remove the PRO restricted status without the consent of the Db2 system administrator or database administrator, because updates to the partition might cause data loss.

Severity

4 (warning)

DSNU1422I ***csect-name*** **DELETE CRITERIA IS IGNORED AND RETAIN LAST(2) IS IN EFFECT DUE TO PRO RESTRICTED STATE ON** ***object-type object-qualifier.object-name*** **PARTITION** ***part***

Explanation
The MODIFY RECOVERY utility was executed on a table space partition that is in Persistent Read Only (PRO) restricted status. The two most recent full image copies of the partition will be retained along with the SYSIBM.SYSLGRNX records for the partition.

This condition occurs from using the REPAIR utility to set the PRO restricted status for the purpose of prohibiting updates.

csect-name
The name of the control section that issued the message.

object-type
The type of object.

object-qualifier.object-name
The name of the object, as a qualified name.

part
The partition number for a partitioned table space.

System action:
Utility processing on the object is terminated.

User response:
No action is required. Do not remove the PRO restricted status without the consent of the Db2 system administrator or database administrator, because updates to the partition might cause data loss.

Severity

4 (warning)

DSNU1423I ***csect-name utility-name*** **UTILITY WILL NOT PROCESS*****object-type object-qualifier.object-name*** **PARTITION** ***part*** **IN PRO RESTRICTED STATE**

Explanation
The COPY utility was executed on a table space partition that is in Persistent Read Only (PRO) restricted status. An image copy will not be created for this partition due to the PRO restricted status.

This condition occurs from using the REPAIR utility to set the PRO restricted status for the purpose of prohibiting updates.

csect-name
The name of the control section that issued the message.

utility-name
The name of the utility.

object-type
The type of object.

object-qualifier.object-name
The name of the object, as a qualified name.

part
The partition number for a partitioned table space.

System action:
The table space is not copied.

User response:
No action is required. Do not remove the PRO restricted status without the consent of the Db2 system administrator or database administrator, because updates to the partition might cause data loss.

Severity

0 (informational)

DSNU1424I ***csect-name utility-name*** **UTILITY MUST BE EXECUTED AT THE PARTITION LEVEL ON** ***object-type***

***object-qualifier.object-name* DUE TO PRO RESTRICTED STATE**

Explanation
An attempt was made to execute the COPY utility or MODIFY RECOVERY utility at the table space level (DSNUM ALL option) on a table space with one or more partitions in Persistent Read Only (PRO) restricted status.

This condition occurs from using the REPAIR utility to set the PRO restricted status for the purpose of prohibiting updates.

csect-name
The name of the control section that issued the message.

utility-name
The name of the utility.

object-type
The type of object.

object-qualifier.object-name
The name of the object, as a qualified name.

System action:
Utility processing on the object is terminated.

User response
Execute the COPY utility or MODIFY RECOVERY utility at the partition level by using the DSNUM *n* option or by using a LISTDEF list with the PARTLEVEL option.

Do not remove the PRO restricted status without the consent of the Db2 system administrator or database administrator, because updates to the partition might cause data loss.

Severity

8 (error)

DSNU1425I ***csect-name* PRO RESTRICTED STATE ON *object-type object-qualifier.object-name* PROHIBITS PROCESSING**

Explanation
An attempt was made to execute a utility on a table space partition that is in Persistent Read Only (PRO) restricted status, and updates are not allowed.

This condition occurs from using the REPAIR utility to set the PRO restricted status for the purpose of prohibiting updates.

csect-name
The name of the control section that issued the message.

object-type
The type of object.

object-qualifier.object-name
The name of the object, as a qualified name.

System action:
Utility processing on the object is terminated.

User response:
Check with the Db2 system administrator or database administrator. Do not remove the PRO restricted status without the consent of the Db2 system administrator or database administrator, because updates to the partition might cause data loss.

Severity

8 (error)

DSNU1450I ***csect-name* - CHARACTER CONVERSION FROM CCSID *from-ccsid* TO CCSID *to-ccsid* FAILED WITH ERROR CODE 'error-code' FOR TABLE *dbid.obid* COLUMN 'column-number'.**

Explanation

A conversion error occurred during the conversion of a string to a different coded character set. The error occurred during the processing of the utility statement.

The *from-ccsid* identifies the coded character set of to be converted. and the *to-ccsid* identifies the coded character set to which it must be converted.

The 'error-code' indicates the type of error as defined as follows: 8 - Length exception (for example, expansion required for PC MIXED data exceeds the maximum length of the string). 12 - Invalid code point 16 - Form exception (for example, invalid MIXED data). 20 - Translate procedure error (for example, an error during Unicode/390 stage 2 conversions or an exit set the length control field of the string to an invalid value). 24 - the conversion services have not been setup correctly or the conversion is not supported.

The *dbid.obid* gives the database ID and the table OBID of the object with the conversion error. This could be either the target or the source of the conversion.

The 'column-number' gives the column number of the failing object. This could be either the target or the source of the conversion.

System action

The utility job is terminated.

User response

Refer to Collecting diagnostic data (Collecting data) for information on identifying and reporting the problem. The user can generate a dump by adding the DIAGNOSE ABEND statement in the utility job and rerunning the utility. If the error can be fixed, correct the error and resubmit the utility. Otherwise, issue the TERM utility command to terminate the utility.

Severity

8 (error)

DSNU1455I ***csect-name obj-type obj-qual.obj-name* NOT CLONED**

Explanation

You specified an object-name along with the CLONE keyword, but the object is not involved with cloning. This message will also be issued if you specified an invalid clone object-name.

System action

Utility processing is not initiated.

User response

Correct the object-name to specify a clone object and resubmit the job.

Severity

8 (error)

DSNU1457I ***csect-name util-name* UTILITY MAY NOT BE RUN AGAINST CLONE OBJECT *qualifier.object-name***

Explanation

An attempt was made to execute utility *util-name* against a clone object *qualifier.object-name*. This is not allowed. The named object cannot be processed by the named Db2 utility.

System action

The utility job is terminated.

User response

Remove the invalid utility control statements, or refer to the base object, and resubmit the job.

Severity

8 (error)

DSNU1458I ***csect-name* KEYWORD OR OPERAND *oooooo* INVALID WITH CLONE OBJECT *qualifier.object-name* FOR THE *uuuuuu* UTILITY**

Explanation

The use of KEYWORD or OPERAND *oooooo* of the *uuuuuu* utility is invalid when specified for a clone object. The object you specified cannot be processed by the named Db2 utility.

System action

The utility job is terminated.

User response

Remove the invalid utility control statements, or refer to a base object, and resubmit the job.

Severity

8 (error)

DSNU1459I ***csect-name* KEYWORD OR OPERAND *oooooo* INVALID WITH AN OBJECT INVOLVED IN CLONING *qualifier.object-name* FOR THE *uuuuuu* UTILITY**

Explanation

The use of KEYWORD or OPERAND *oooooo* of the *uuuuuu* utility is invalid when specified for an object involved in cloning.

System action

The utility job is terminated.

User response

Remove the invalid utility control statements and resubmit the job.

Severity

8 (error)

DSNU1502I ***csect-name* - RECOVER OF *obj-type obj-qual.objname dsnum n* WILL PROCEED TO LOG POINT X'*rba/lrsn*'**

Explanation

Db2 issues this message if the RECOVER utility statement includes the TOLASTCOPY or TOLASTFULLCOPY keyword. The message provides information on the point in time that the object was

recovered to. In a data sharing environment, the log point identified is an LRSN. Otherwise, the log point identified is an RBA.

System action

The RECOVER utility statement continues processing.

Severity

0 (informational)

DSNU1504I ***csect-name*** **RECOVERY OF NOT LOGGED** ***obj-type obj-qual.obj-name*** **CANNOT PROCEED BECAUSE THE TOLOGPOINT OR TOLOGRBA SPECIFIED IS NOT A RECOVERABLE POINT**

Explanation

The object has the NOT LOGGED logging attribute. For not logged objects, the recovery point must match a recoverable point. A recoverable point is established when one of the following circumstances are true:

- When a table space is altered from LOGGED to NOT LOGGED, which alters all of the index spaces for indexes on all of the tables in the table space
- When an image copy is taken against a not logged table space or a not logged index space

System action

Utility processing halts for this object. The utility job completes with a return code of 8. If the utility job step includes an OPTIONS control statement with the EVENT(ITEMERROR,SKIP) option, the utility will process the next item in the list.

User response

Resubmit the RECOVER job with TOLASTCOPY or TOLOGPOINT that matches a recoverable point.

Severity

8 (error)

DSNU1505I ***csect-name*** **RECOVERY OF THE NOT LOGGED** ***obj-type obj-qual.obj-name*** **WAS TO THE LAST RECOVERABLE POINT: RBA/LRSN** ***rba/lrsn*****. THE OBJECT HAS BEEN CHANGED SINCE THAT POINT**

Explanation

A full recovery was requested, but because the object is not a logged object, it was recovered to its last recoverable point, which means that any changes made to the object after the recoverable point are lost. This message warns that the object has been modified since the last recoverable point.

A recoverable point is established when one of the following circumstances is true:

- When a table space is altered from LOGGED to NOT LOGGED, which alters all of the index spaces for indexes on all of the tables in the table space
- When an image copy is taken against a not logged table space or a not logged index space

System action

Processing continues. Db2 cannot recover the modifications that were made to the object since the last recoverable point.

Severity

4 (warning)

DSNU1506I ***csect-name*****: RECOVER** ***recover-type*** **OF** ***object-type object-qualifier.object-name*** **IS NOT ALLOWED BECAUSE THE LOGGING ATTRIBUTE OF THE OBJECT IS NOT LOGGED**

Explanation

The object to be recovered has a NOT LOGGED logging attribute, so no log records are available for recovery.

csect-name
The name of the control section that issued the message.

recover-type
The type of recovery: LOGONLY or BACKOUT.

object-type
The type of object.

object-qualifier.object-name
The name of the object, as a qualified name.

System action

Utility processing halts for this object. The utility job completes with a return code of 8.

If the utility job step includes an OPTIONS control statement with the EVENT(ITEMERROR,SKIP) option, the utility will process the next item in the list.

User response

Recover the object to a previous point in time that is a recoverable point. A recoverable point is:

- When a table space is altered from LOGGED to NOT LOGGED, thus altering all indexes on all tables in the table space.
- When an image copy is taken against a not logged table space or a not logged index.

Run the REPORT utility with the RECOVERY option and analyze the output to determine which recoverable point you want to use. Recover the not logged object to the recoverable point by using the TOLOGPOINT, TORBA,TOCOPY, TOLASTCOPY, or TOLASTFULLCOPY recovery options.

Severity

8 (error)

Related reference
REPORT (Db2 Utilities)
RECOVER (Db2 Utilities)

DSNU1507I ***csect-name*: THE IMAGE COPY FOR *obj-type obj-qual.obj-name* IS NOT USABLE. RECOVERY BY FALLBACK TO THE PREVIOUS IMAGE COPY IS NOT POSSIBLE BECAUSE REQUIRED LOG RECORDS WERE NOT WRITTEN**

Explanation

Db2 cannot use the identified image copy. Db2 cannot recover by falling back to the previous image copy and applying log records. Some required log records for *object-qualifier.object-name* were not written because *object-qualifier.object-name* had the NOT LOGGED attribute.

System action

Utility processing halts for this object. The utility job completes with a return code of 8.

If the utility job step includes an OPTIONS control statement with the EVENT(ITEMERROR,SKIP) option, the utility will process the next item in the list.

User response

Check the utility job output for prior messages indicating an allocation, open, or read error on the image copy data set identified by the DSNU515I message. Correct the situation if possible. If the problem cannot be corrected, then run the REPORT RECOVERY utility for the object to determine the options that are available for recovery.

Severity

8 (error)

DSNU1508I ***csect-name* RECOVERY OF *obj-type obj-qual.obj-name* IS NOT ALLOWED TO A NOT LOGGED POINT**

Explanation

The object has the LOGGED attribute specified, but the TORBA, TOLOGPOINT, TOCOPY, TOLASTCOPY, TOLASTFULLCOPY option identifies a point when the object had the NOT LOGGED attribute. This is not allowed because the current logging attribute of the object must match the logging attribute of the object at the time of the chose recovery point.

System action

If OPTIONS EVENT(ITEMERROR,SKIP) has been specified for the job step, then processing continues for the other objects in the list. Otherwise, recovery processing terminates.

User response

Alter the logging attribute of the object to NOT LOGGED, then resubmit the RECOVER utility job.

Severity

8 (error)

DSNU1510I ***csect-name* - LOG APPLY PHASE COMPLETE, ELAPSED TIME: *HH.MM.SS***

Explanation

This message is issued at the normal completion of the LOG APPLY phase of the RECOVER utility. The time that has elapsed between the beginning and completion of this phase was:

hh
hours

mm
minutes

ss
seconds

System action

Processing continues.

Severity

0 (informational)

DSNU1511I ***csect-name* - FAST LOG APPLY WAS NOT USED FOR *utility-name***

Explanation

FAST LOG APPLY was not used during utility processing.

csect-name
The name of the control section that issued the message.

utility-name
The name of the utility: RECOVER or FLASHCOPY WITH CONSISTENCY.

System action

Processing continues.

User response

No action is required.

Severity

0 (informational)

DSNU1512I ***csect-name*** **RECOVERY OF A SINGLE PIECE OF** ***obj-type obj-qual.obj-name*** **IS NOT ALLOWED TO A DIFFERENT ROW FORMAT**

Explanation

You attempted to recover a single piece of a multi-piece nonpartitioned table space to a point in time in which the rows are in a different format than the current format. For example, this error can occur when a table space is in reordered row format and you attempted to recover a piece of the table space to a point in time when the table space was in basic row format.

System action

The RECOVER utility terminates.

Programmer response

To recover the data, you can do one of the following actions:

- Recover the entire table space rather than a single piece.
- Recover the piece to a point-in-time when the table space is in the same row format.

Severity

8 (error)

DSNU1513I ***csect-name*** **RECOVER OF** ***obj-type obj-qual.obj-name*** **WITH A VALIDPROC IS NOT ALLOWED TO A DIFFERENT ROW FORMAT**

Explanation

You cannot recover an object that requires the recovery of part or all of a table with varying-length columns and a VALIDPROC when the RECOVER is one of the following types:

- From a point in time when the table space was in reordered row format to a point in time when the table space was in basic row format
- From a point in time when the table space was in basic row format to a point in time when the table space was in reordered row format.

System action

The RECOVER utility terminates.

Programmer response

To recover the object, you can execute the following steps:

1. ALTER the VALIDPROC to null on all tables that are part of the object to be recovered.
2. RECOVER the object.
3. Make any necessary changes to the VALIDPROCs so that the VALIDPROCs are in sync with the current format of the row.
4. ALTER ADD the VALIDPROCs to the tables.

Severity

8 (error)

DSNU1519I ***csect-name*** **INVALID SPECIFICATION OF RESTOREBEFORE X'*xxxxxxxxxxxx*'**

Explanation

This message is issued for one of the following reasons:

- The LRSN or RBA value that was specified for the RESTOREBEFORE parameter is greater than the LRSN or RBA value that was specified for the TOLOGPOINT or TORBA parameter. The RESTOREBEFORE value determines the ending point of the search for image copies to restore. Therefore, the RESTOREBEFORE value must be less than the LRSN or RBA value that was specified for the TOLOGPOINT option. The RESTOREBEFORE value must also be less than the RBA value that was specified for the TORBA option.

- RECOVER did not find an image copy, concurrent copy, or system-level backup with a START RBA, START LRSN, or DATA COMPLETE LRSN value that is lower than the value that was specified for the RESTOREBEFORE parameter.

X'*xxxxxxxxxxxx*'
The LRSN or RBA value that was specified for the RESTOREBEFORE parameter.

System action

The RECOVER utility terminates processing.

User response

Take one of the following actions:

- Examine the RECOVER control statement. Modify the RESTOREBEFORE parameter value to be less than the TOLOGPOINT or TORBA parameter value. Resubmit the job.
- Run REPORT RECOVERY. In the output, examine image copy, concurrent copy, and system-level backup information for the objects that are being recovered. Find START RBA, START LRSN, or DATA COMPLETE LRSN in the output. These values indicate the first RBA or LRSN value after each copy was taken. Change the RESTOREBEFORE value in the RECOVER control statement to be higher than the smallest START RBA, START LRSN, or DATA COMPLETE LRSN value that you find in the REPORT RECOVERY output. Resubmit the job.

Severity

8 (error)

DSNU1520I **THE RECOVERY BASE FOR *obj-type obj-qual.obj-name dsnum n* IS THE SYSTEM-LEVEL BACKUP WITH DATE = yyyymmdd, TIME = hhmmss, AND TOKEN = X *byte-string***

Explanation

This message is issued by the RECOVER Utility in the RESTORE phase when a system-level backup has been chosen as the recovery base for the identified object.

System programmer response

Recovery processing continues.

Severity

0 (informational)

DSNU1521I ***csect-name* A LOGONLY RECOVERY CANNOT BE DONE BECAUSE THE HEADER PAGE CANNOT BE ACCESSED FOR *obj-type obj-qual.obj-name dsnum n***

Explanation

The header page could not be read. Db2 stops the RECOVER utility from proceeding with a LOGONLY recovery because the starting point is unavailable.

System programmer response

REMOVE the LOGONLY keyword from the RECOVER utility statement and recover the object by using an image copy along with a log.

Severity

8 (error)

DSNU1522I **THE DFSMSHSM CALL TO RESTORE *obj-type obj-qual.obj-name dsnum n* FAILED WITH RC = X'hsm-rc' and REASON CODE = X'hsm-rsc'. SEE THE JOB LOG FOR DFSMSHSM MESSAGES INDICATING THE CAUSE OF THE ERROR**

Explanation

This message is issued by the RECOVER utility when the call to DFSMShsm to restore the data sets for the object from a system-level backup failed with the return code and reason code indicated in the message. The HSM job log will contain error messages issued by DFSMShsm that indicate the cause of the error.

System action

If OPTIONS EVENT(ITEMERROR,SKIP) was specified, the recovery of this object will be skipped and the recovery of the other objects in the list will continue. Otherwise, the RECOVER utility will terminate.

System programmer response

Review the RECOVER utility job output and, in particular, the DFSMShsm messages in the HSM job log to determine the cause of the failure. If the restore of the data sets failed due to target volume connectivity problems or hardware failures, the system storage administrator should be contacted to resolve the problem. After the problem is resolved, you can run the RECOVER utility job again.

If the problem with the system-level backup cannot be resolved, you can consider these recovery options to bypass the problem:

- RECOVER with the RESTOREBEFORE option to direct the recovery to find a recovery base prior to the system-level backup that has the problem. More log apply processing will be needed during the recovery of the object.
- RECOVER with the FROMDUMP option (or specify YES for the RESTORE/RECOVER FROM DUMP installation option on installation panel DSNTIP6) to direct the recovery to use a copy of the system-level backup that had been dumped to tape.
- Specify SYSTEM-LEVEL BACKUPS as NO on installation panel DSNTIP6 to avoid choosing system-level backups as a recovery base.

Problem determination

The DFSMShsm message(s) appearing in the HSM job log will indicate the cause of the failure.

Severity

8 (error)

DSNU1523I **THE DFSMSHSM ARCXTRCT MACRO INVOCATION ISSUED BY THE RECOVER UTILITY FAILED WITH RC = X'*hsm-rc*'**

Explanation

The RECOVER utility attempted to call the DFSMShsm ARCXTRCT macro, but the invocation failed.

hsm-rc
The return code from DFSMShsm.

RECOVER calls the ARCXTRCT macro to retrieve information for system-level backups for the database copy pool when the SYSTEM_LEVEL_BACKUPS subsystem parameter is set to YES.

System action

The RECOVER utility terminates.

System programmer response

Ensure that the HSM address space is active.

If you need help determining why the ARCXTRCT macro failed, call IBM Support for help with DFSMShsm.

Severity

8 (error)

Related reference
RECOVER (Db2 Utilities)
SYSTEM-LEVEL BACKUPS field (SYSTEM_LEVEL_BACKUPS subsystem parameter) (Db2 Installation and Migration)

Related information
ARCXTRCT: Extracting data from DFSMShsm (DFSMShsm Managing Your Own Data)
Return codes from user macros (DFSMShsm) (DFSMShsm Managing Your Own Data)

DSNU1524I ***obj-type obj-qual.obj-name dsnum n* CANNOT BE RESTORED FROM THE SYSTEM LEVEL BACKUP WITH DATE = yyyymmdd, TIME = hhmmss, AND TOKEN = X 'byte-string' BECAUSE THE SPECIFIED DUMPCLASS *hsm-dumpclass-nm* IS NOT KNOWN TO DFSMSHSM**

Explanation

This message is issued by the RECOVER Utility when the DFSMShsm dumpclass does not exist for the system-level backup that has been chosen as the recovery base for the identified object. The DFSMShsm dump class name can be specified on the RECOVER statement via the FROMDUMP DUMPCLASS(*hsm-dumpclass-nm*) options, or on installation panel DSNTIP6 by specifying RESTORE/RECOVER From dump => YES and DUMP CLASS NAME => *hsm-dumpclass-nm*.

System action

If OPTIONS EVENT(ITEMERROR,SKIP) was specified, then the recovery of this object will be skipped and the recovery of the other objects in the list will continue. Otherwise, the RECOVER Utility will terminate.

System programmer response

Issue the DFSMShsm LIST COPYPOOL command with the ALLVOLS option for the Db2 database copy pool. Analyze the output from the LIST COPYPOOL ALLVOLS command to see which dump classes exist for the system-level backup identified by the token. Correct the dump class specification on the RECOVER statement or on installation panel DSNTIP6, and rerun the RECOVER.

Severity

8 (error)

DSNU1525I ***obj-type obj-qual.obj-name dsnum n* CANNOT BE RESTORED VIA FLASHCOPY FROM THE SYSTEM-LEVEL BACKUP WITH DATE = yyyymmdd, TIME = hhmmss, AND TOKEN = X *byte-string***

Explanation

The RECOVER Utility has determined that the system-level backup chosen as the recovery base for the identified object either has not completed the background copy or does not reside on DASD, so the identified object cannot be restored via FlashCopy.

System action

If OPTIONS EVENT(ITEMERROR,SKIP) was specified, then the recovery of this object will be skipped and the recovery of the other objects in the list will continue, otherwise the RECOVER Utility will terminate.

System programmer response

Issue the DFSMShsm LIST COPYPOOL command with the ALLVOLS option for the Db2 database copy pool. Analyze the output from the LIST COPYPOOL command to see whether the system-level backup identified by the token is recoverable. If the system-level backup no longer resides on DASD and has been dumped to tape, then rerun the RECOVER specifying the FROMDUMP option.

Severity

8 (error)

DSNU1526I ***obj-type obj-qual.obj-name dsnum n* CANNOT BE RESTORED FROM THE SYSTEM-LEVEL BACKUP WITH TOKEN = X *byte-string* BECAUSE DFSMSHSM HAS NO RECORD OF THE SYSTEM-LEVEL BACKUP**

Explanation

The RECOVER Utility has chosen the identified system-level backup as the recovery base for this object, but DFSMShsm has no record of a system-level backup with this particular token.

System action

If OPTIONS EVENT(ITEMERROR,SKIP) was specified, then the recovery of this object will be skipped and the recovery of the other objects in the list will continue, otherwise the RECOVER Utility will terminate.

System programmer response

Issue the DFSMShsm LIST COPYPOOL command with the ALLVOLS option for the Db2 database copy pool. Run the Print Log Map Utility (DSNJU004) to print the system-level backup information. If data sharing, ensure that the system-level backup information from all members is gathered. Locate the systemlevel backup information in the DSNJU004 output and compare it with the output from the LIST COPYPOOL command. DFSMShsm cannot be used as a recovery base because it has no record of the system-level backup.

The RESTOREBEFORE option may be specified on the RECOVER statement to direct the recovery to choose a recovery base that is older than the identified system-level backup, or SYSTEM-LEVEL BACKUPS => NO can be specified on installationation panel DSNTIP6 to avoid using system-level backups as a recovery base.

Severity

8 (error)

DSNU1527I ***obj-type obj-qual.obj-name dsnum n* WAS SUCCESSFULLY RESTORED FROM A *slb-type*, ELAPSED TIME = hh:mm:ss**

Explanation

The object was successfully restored from a system-level backup via FlashCopy or from a system-level backup that was dumped to tape. slb-type will be FLASHCOPY for the former and DUMP COPY for the latter.

System action

Recovery processing continues.

Severity

0 (informational)

DSNU1528I ***obj-type obj-qual.obj-name dsnum n* CANNOT USE THE SYSTEM-LEVEL BACKUP WITH DATE = yyyymmdd, TIME = hhmmss AND TOKEN = X *byte-string* AS A RECOVERY BASE**

Explanation

This message is issued by the RECOVER utility for a point-in-time recovery when a system-level backup was chosen as the recovery base for an object. However, it cannot be used for the restore because one of the following utilities was executed on the object after the creation of the system-level backup:

- REORG TABLESPACE
- REORG INDEX
- REBUILD INDEX
- LOAD REPLACE
- RECOVER (from an image copy)

This restriction exists because the underlying data sets for the object might have been moved to different DASD volumes during the execution of these utilities. DFSMShsm requires that the data sets for an object must remain on the same DASD volume(s) to be correctly restored from the system-level backup.

System action

If OPTIONS EVENT(ITEMERROR,SKIP) was specified, the recovery of this object will be skipped and the recovery of the other objects in the list will continue. Otherwise, the RECOVER utility will terminate.

System programmer response

Refer to the *Db2 Utilities Guide and Reference* for a discussion of RECOVER utility constraints.

Severity

8 (error)

DSNU1530I ***csect-name*** **- OBSOLETE OR NFM DB2 CATALOG OR DIRECTORY OBJECT** ***object-type object-qualifier.object-name*** **WILL NOT BE PROCESSED**

Explanation

The specified Db2 catalog or directory object is not available either because the object is no longer used by Db2 or because it will not exist until Db2 prepares to enter new-function mode.

csect-name
The name of the control section that issued the message.

object-type
The type of object.

object-qualifier.object-name
The name of the object, as a qualified name.

This message is expected for: Db2 catalog and directory objects that will be created at the beginning of enabling-new-function mode and for obsolete Db2 catalog and directory objects that have been converted into new objects by installation job DSNTIJEN.

For example, in conversion mode, RECOVER and REBUILD INDEX skip catalog and directory objects that are new for the version to which you are migrating. In new-function mode, these utilities skip catalog and directory objects that are obsolete in the version to which you are migrating. Specifying OPTIONS EVENT(ITEMERROR,SKIP) or OPTIONS EVENT(ITEMERROR,HALT) does not affect the skipping of new or obsolete objects.

System action

Processing continues.

The utility continues to process other specified objects, if any exist, but the COPY, RECOVER, and REBUILD INDEX utilities skip the processing of the object that is named in this message.

For image copies that are allocated in JCL using DD statements, the COPY utility will open and close the output image copy data set if the data set resides on tape. This action happens even if this message is issued, in order to facilitate successful tape stacking of subsequent image copy data sets.

System programmer response

No action is required if Db2 is in either conversion mode or enabling-new-function mode.

If Db2 is in new-function mode, edit the COPY, RECOVER, and REBUILD INDEX jobs to remove the obsolete Db2 catalog and directory objects.

Severity

0 (informational)

Related concepts

Job DSNTIJEN (Db2 Installation and Migration)

Related tasks

Recovering catalog and directory objects (Db2 Utilities)

DSNU1540I ***csect-name*** **- CONSISTENCY PROCESSING FOR FLASHCOPY IS STARTED.**

Explanation

FlashCopy consistency processing has begun.

csect-name
The name of the control section that issued the message.

System action

Processing continues.

Message DSNU15401I is issued when consistency processing finishes.

User response

Look for other messages that might indicate problems that require action.

Severity

0 (informational)

DSNU1541I ***csect-name*** **- CONSISTENCY PROCESSING FOR FLASHCOPY IS FINISHED, ELAPSED TIME=*elapsed-time***

Explanation

FlashCopy consistency processing has completed.

csect-name
The name of the control section that issued the message.

elapsed-time
The time elapsed since the beginning of FlashCopy consistency processing.

System action

Processing continues.

User response

Look for other messages that might indicate problems that require action. The beginning of FlashCopy consistency processing is indicated by message DSNU1540I.

Severity

0 (informational)

DSNU1542I ***csect-name*** **- RECOVER BACKOUT ANALYSIS PROCEEDING FROM CURRENT LOGPOINT OF X'*current-logpoint*'**

Explanation

This message indicates the starting point in the Db2 log for the analysis of RECOVER BACKOUT processing for all objects in the list.

csect-name
The name of the control section that issued the message.

current-logpoint
The RBA or LRSN of the current point in the log.

System action

RECOVER processing continues.

User response

No action is required.

Severity

0 (informational)

Related reference
RECOVER (Db2 Utilities)

DSNU1543I ***csect-name*** **- FCCOPYDDN TEMPLATE IS INVALID BECAUSE IT DOES NOT CONTAIN PART OR DSNUM**

Explanation

The template the was used for a FlashCopy did not include `&part(&pa)` or `&dsnum(&ds)`. One of these variables is required in the template.

csect-name
The name of the control section that issued the message.

System action

The utility stops processing.

User response

Correct the template, which can be specified in the utility control statement or as a subsystem parameter.

Severity

8 (error)

DSNU1544I ***csect-name*** **RECOVER BACKOUT YES CANNOT PROCEED ON *object-type object-qualifier.object-name* DUE TO SQL MASS DELETE OR OTHER TABLE ACTIVITY**

Explanation

The BACKOUT YES option was specified for the RECOVER utility, but the utility cannot proceed because of one the following operations on the object:

- SQL mass DELETE
- TRUNCATE TABLE
- DROP TABLE

The deleted data for these operations is not logged and therefore cannot be backed out. A BACKOUT YES recovery is prohibited when one of these operations has occurred between the recovery point (specified by TOLOGPOINT or TORBA) and the current time.

csect-name
The name of the control section that issued the message.

object-type
The type of object.

object-qualifier.object-name
The name of the object, as a qualified name.

System action

The RECOVER job fails.

User response

Remove the BACKOUT YES option from the RECOVER utility statement and resubmit the job. This revised statement indicates that the utility is to recover the list of objects by restoring a backup and then applying the logs forward to the recovery point.

Severity

8 (error)

Related concepts

Point-in-time recovery (Db2 Utilities)

Related reference

Syntax and options of the RECOVER control statement (Db2 Utilities)

DSNU1545I ***csect-name*** **RECOVER WITH BACKOUT YES CANNOT PROCEED. THE RECOVERY POINT IS OLDER THAN THE EARLIEST CHECKPOINT IN THE BSDS.**

Explanation

The recovery point that is identified by TOLOGPOINT or TORBA is not contained within the most recent Db2 system checkpoints that are recorded in the BSDS for each member. RECOVER with the BACKOUT YES option cannot proceed, because the checkpoint RBA that is before the recovery point for each member is required for backout processing.

csect-name
The name of the control section that issued the message.

System action

The RECOVER utility ends with return code 8 and does not process any of the objects. The objects are left in the state that they were in before the RECOVER operation.

System programmer response

Remove the BACKOUT YES option and resubmit the RECOVER job. This revised job recovers the objects to the same point in time. However, the data is recovered by using a recovery base and applying the logs rather than using backout processing.

Recommendation: Use the output from the REPORT utility with the RECOVERY option for all of the objects to ensure that a valid recovery base exists before you run RECOVER.

Severity

8 (error)

Related concepts

REPORT output (Db2 Utilities)

Related reference

Syntax and options of the RECOVER control statement (Db2 Utilities)

DSNU1550I ***csect-name*** **LOGCSR IS STARTED FOR MEMBER *member-name*; PRIOR CHECKPOINT RBA= *rba-value***

Explanation

This message is issued at the beginning of the log analysis process by the RECOVER utility for the specified member. This message is issued for recover to point-in-time with consistency, only when the objects at the recovery point on the specified member have active units of recovery. This message identifies the RBA of the checkpoint from which the RECOVER utility will process the log records during the LOGCSR phase for this Db2 member.

In a data sharing environment, *member-name* identifies the Db2 member. In a non-data sharing environment, *member-name* is blank.

System action

The RECOVER utility starts the log analysis process for the specified Db2 member.

Severity

0 (informational)

Related concepts

How RBA and LRSN values are displayed (Db2 Administration Guide)

DSNU1551I ***csect-name*** **LOGCSR IS FINISHED FOR MEMBER *member-name*; ELAPSED TIME = *hh:mm:ss***

Explanation

This message is issued at the completion of the log analysis process by the RECOVER utility for the specified member. This messages also shows the elapsed time for the LOGCSR phase on the specified Db2 member. The format of the elapsed time is 'hh:mm:ss' (hours, minutes, and seconds).

In a data sharing environment, *member-name* identifies the Db2 member. In a non-data sharing environment, *member-name* is blank.

System action

If there are other Db2 members that require log analysis, the analysis continues with the next member. Otherwise, the DSNU1552i message is issued to mark the end of the LOGCSR phase for this RECOVER utility.

Severity

0 (informational)

DSNU1552I ***csect-name*** **LOGCSR PHASE COMPLETE; ELAPSED TIME=** ***hh:mm:ss***

Explanation

This message is issued at the completion of LOGCSR phase of the RECOVER utility. This message is issued for recover to point-in-time with consistency, only when the objects at the recovery point on any of the Db2 members have active units of recovery. This message shows the total elapsed time for the LOGCSR phase. The format of the elapsed time is 'hh:mm:ss' (hours, minutes, and seconds).

System action

The RECOVER utility continues to the next phase for processing.

Severity

0 (informational)

DSNU1553I ***csect-name utility-name*** **DETECTS THE FOLLOWING ACTIVE URS: INFLIGHT=** ***inflight-count*****, INABORT=** ***inabort-count*****, INDOUBT=** ***indoubt-count*****, POSTPONED ABORT=** ***postponed-count*** **COMMITTED=** ***committed-count*** **ABORTED=** ***aborted-count***

Explanation

The LOGCSR phase of the utility is complete or was skipped because no active units of recovery (URs) existed at the recovery point. The counts of units of recovery in the message indicate the number of units of work that have execution states that require rollback action to be performed during this recovery process in order to ensure recovery consistency.

csect-name
The name of the control section that issued the message.

utility-name
The name of the utility: RECOVER or FLASHCOPY WITH CONSISTENCY.

inflight-count
The number of inflight units of recovery. These units of recovery neither completed phase one of the commit process nor began the process of backing out during the recovery point. The utility will roll back the changes during the LOGUNDO phase.

inabort-count
The number of in-abort units of recovery. These units of recovery were in the process of being backed out during recovery point. The utility will roll back the changes during the LOGUNDO phase.

indoubt-count
The number of indoubt units of recovery. These units of recovery were interrupted between phase one and phase two of the commit process. They are treated as in-abort units of recovery, and the utility will roll back the changes during the LOGUNDO phase.

postponed-count
The number of postponed in-abort units of recovery. The backout of these units of recovery was postponed in an earlier restart process, and they were not attended to prior to the recovery point. The utility will roll back the changes during the LOGUNDO phase.

committed-count
The number of committed units of recovery. These units of recovery will be backed out during RECOVER backout log apply processing.

aborted-count
The number of units of recovery that have completed abort processing. These units of recovery will be backed out during RECOVER backout log apply processing.

If an active unit of recovery exists during the recovery point, the message text is followed by a table that shows the status of units of recovery that were active during the recovery to point-in-time on the objects being recovered. This table helps to identify the following conditions:

- Units of recovery that have changes on the recovered objects which need to be rolled back during the LOGUNDO phase.
- The scope of log records that require processing in order to roll back the changes.

For each active unit of recovery in the table, the table contains one line that shows information about the unit of recovery:

```
MEM T CONID CORRID AUTHORIZATION ID PLAN S
URID DAY TIME
```

MEM
The name of theDb2 member to which this unit of recovery belongs. In a data sharing environment, this field identifies theDb2 member. In a non-data sharing environment, this field is blank.

T
The connection type:

B
Batch: A batch program or user.

I
Internal: A system service being performed on a user's behalf.

S
Subsystem: Work that originated from an attached subsystem, either CICS or IMS/VS.

CONID
The connection identifier for related units of recovery. Batch connections are not related to any other connection. Subsystem connections with the same identifier indicate units of recovery that originated from the same subsystem.

CORRID
The correlation identifier, which is unique within a subsystem connection. It relates a unit of recovery to a particular CICS or IMS/VS transaction.

AUTHORIZATION ID
Authorization identifier of the user for whom this unit of recovery was created.

PLAN
Name of the plan that is allocated to the unit of recovery.

S
Status of the unit of recovery during the recovery point:

D
Indoubt: The unit of recovery had completed the first phase of commit, but Db2 had not received the second phase instruction. Its change on the objects being recovered must be rolled back.

E
Committed: The unit of recovery has been committed.

F
Inflight: The unit of recovery had not completed the first phase of commit. Its change on the objects being recovered must be rolled back.

P
Postponed abort: The unit of recovery has not yet completed backout afterDb2 was last restarted. Its change on the objects being recovered must be rolled back.

URID
The unit of recovery identifier, which is the log RBA of the beginning of this unit of work.

DAY
The day that the unit of recovery was created, in the format *ddd*. It is approximately the time of the first SQL statement of the application or the first SQL statement following a commit point.

TIME
The time the unit of recovery was created, in the format *hh:mm:ss*. It is approximately the time of the first SQL statement of the application or the first SQL statement following a commit point.

This line is followed by one or more lines that show information about the objects that are included in the job and are modified by this unit of recovery. If the object is partitioned, one line represents each partition that is included in the job and is modified by this unit of recovery:

```
DBNAME SPACENAME DBID/PSID PART RBA
```

DBNAME
The name of the database to which the table space or index space belongs.

SPACENAME
The table space or index space that is changed by this unit of recovery.

DBID/PSID
The database and page set object identifiers (OBIDs).

PART
The partition number, if the table space or index space is partitioned.

RBA
In a non data-sharing environment, the RBA of the first update made by this unit of recovery on this object. In a data-sharing environment, the LRSN of the first update made by this unit of recovery on this object.

System action

The LOGUNDO phase begins.

User response

No action is required.

Severity

0 (informational)

DSNU1554I ***csect-name*** **LOGUNDO IS STARTED FOR MEMBER** ***member-name***

Explanation

This message signals the beginning of the LOGUNDO phase by the RECOVER Utility or FlashCopy with consistency. This message is issued in the following situations:

- A point-in-time recovery with consistency when the objects at the recovery point on any Db2 member have active units of recovery (URs). The changes made by these URs on the objects that are being recovered need to be rolled back in the LOGUNDO phase.
- A RECOVER utility job with the BACKOUT YES option
- A FlashCopy with consistency

csect-name
The name of the control section that issued the message.

member-name
The Db2 member. In the following situations, *member-name* is blank:

- In a non-data sharing environment
- During a FlashCopy with consistency
- During a RECOVER utility job with the BACKOUT YES option

For the last two situations (FlashCopy with consistency and RECOVER BACKOUT YES), Db2 performs a merged LOGUNDO phase instead of a LOGUNDO phase for each member.

System action

The RECOVER utility or FlashCopy with consistency starts the LOGUNDO phase for the Db2 member or members.

Operator response

No action is required.

Severity

0 (informational)

Related concepts
Point-in-time recovery (Db2 Utilities)
FlashCopy image copies (Db2 Utilities)
Related reference
RECOVER (Db2 Utilities)
Related information
DSNU1555I

csect-name RECOVER LOGUNDO STATUS: LOG RECORD AT RBA *current-rba* TO RBA *last-rba* ON MEMBER *member-name*

DSNU1556I
csect-name LOGUNDO IS FINISHED FOR MEMBER *member-name* ; ELAPSED TIME= *elapsed-time*

DSNU1555I ***csect-name*** **RECOVER LOGUNDO STATUS: LOG RECORD AT RBA** ***current-rba*** **TO RBA** ***last-rba*** **ON MEMBER** ***member-name***

Explanation

This message is produced periodically during the LOGUNDO phase of the RECOVER utility or FlashCopy with consistency. The RBAs or LRSNs in this message can be used to monitor the progress of the LOGUNDO phase. The RBA values apply to a non-data sharing environment. The LRSN values apply to a data-sharing environment.

csect-name
The name of the control section that issued the message.

current-rba
The RBA or LRSN of the log record that Db2 is currently processing.

last-rba
The RBA or LRSN of the last log record that Db2 will read in this LOGUNDO phase.

member-name
The Db2 member. In the following situations, *member-name* is blank:

- In a non-data sharing environment
- During a FlashCopy with consistency
- During a RECOVER utility job with the BACKOUT YES option

For the last two situations (FlashCopy with consistency and RECOVER BACKOUT YES), Db2 performs a merged LOGUNDO phase instead of a LOGUNDO phase for each member.

System action

The RECOVER utility or FlashCopy with consistency continues processing.

Operator response

No action is required.

Severity

0 (informational)

Related concepts

Point-in-time recovery (Db2 Utilities)

FlashCopy image copies (Db2 Utilities)

How RBA and LRSN values are displayed (Db2 Administration Guide)

Related reference

RECOVER (Db2 Utilities)

Related information

DSNU1554I
csect-name LOGUNDO IS STARTED FOR MEMBER *member-name*

DSNU1556I
csect-name LOGUNDO IS FINISHED FOR MEMBER *member-name* ; ELAPSED TIME= *elapsed-time*

DSNU1556I *csect-name* LOGUNDO IS FINISHED FOR MEMBER *member-name* ; ELAPSED TIME= *elapsed-time*

Explanation

This message is issued at the completion of the LOGUNDO phase by the RECOVER utility or FlashCopy with consistency.

csect-name
The name of the control section that issued the message.

member-name
The Db2 member. In the following situations, *member-name* is blank:

- In a non-data sharing environment
- During a FlashCopy with consistency
- During a RECOVER utility job with the BACKOUT YES option

For the last two situations (FlashCopy with consistency and RECOVER BACKOUT YES), Db2 performs a merged LOGUNDO phase instead of a LOGUNDO phase for each member.

elapsed-time
The elapsed time for this LOGUNDO phase. The format of the elapsed time is *hh:mm:ss* where:

hh
hours

mm
minutes

ss
seconds

System action

If the RECOVER utility needs to perform rollback operations on other Db2 members, processing continues for the next Db2 member. Otherwise, the DSNU1557I message is issued to mark the end of the LOGUNDO phase.

Operator response

No action is required.

Severity

0 (informational)

Related concepts

Point-in-time recovery (Db2 Utilities)

FlashCopy image copies (Db2 Utilities)

Related reference

RECOVER (Db2 Utilities)

Related information

DSNU1554I
csect-name LOGUNDO IS STARTED FOR MEMBER *member-name*

DSNU1555I
csect-name RECOVER LOGUNDO STATUS: LOG RECORD AT RBA *current-rba* TO RBA *last-rba* ON MEMBER *member-name*

DSNU1557I
csect-name LOGUNDO PHASE COMPLETE; ELAPSED TIME= *hh:mm:ss*

DSNU1557I *csect-name* LOGUNDO PHASE COMPLETE; ELAPSED TIME= *hh:mm:ss*

Explanation

This message is issued at the completion of the LOGUNDO phase of the RECOVER utility. This message shows the total elapsed time for the LOGUNDO phase. The format of the elapsed time is 'hh:mm:ss' (hours, minutes, and seconds).

System action

The RECOVER utility continues to the next phase of processing.

Severity

0 (informational)

DSNU1558I *csect-name* - PRELOGC IS STARTED FOR MEMBER *member-name*, PRIOR CHECKPOINT RBA=*rba-value*

Explanation

The RECOVER utility began the log analysis process for the specified member, and one or more of the objects has a recovery base that is a FlashCopy with consistency, and there were active units of recovery during the FlashCopy. The value of *rba-value* is the RBA value of the checkpoint from which the RECOVER utility will process the log records during the PRELOGC phase for this Db2 member. In a data sharing environment, *member-name* identifies the Db2 member. In a non-data sharing environment, *member-name* is blank.

csect-name
The name of the control section that issued the message.

System action

The RECOVER utility starts the preliminary log analysis process for the specified member.

User response

No action is required.

Severity

0 (informational)

Related concepts
How RBA and LRSN values are displayed (Db2 Administration Guide)
Related reference
RECOVER (Db2 Utilities)

DSNU1559I ***csect-name* PRELOGC IS FINISHED FOR MEMBER *member-name*, ELAPSED TIME=*hh:mm:ss***

Explanation

The RECOVER utility completed the preliminary log analysis for the specified member.

csect-name
The name of the control section that issued the message.

hh:mm:ss
The elapsed time for the operation, in hours, minutes, and seconds.

System action

If other Db2 members require preliminary log analysis, the analysis continues withe the next member. Otherwise, Db2 issues a DSNU1560I message to indicate the end of the PRELOGC phase for this RECOVER utility.

User response

No action is required.

Severity

0 (informational)

Related reference
RECOVER (Db2 Utilities)

DSNU1560I ***csect-name* PRELOGC PHASE COMPLETE, ELAPSED TIME=*hh:mm:ss***

Explanation

the RECOVER utility completed the preliminary log analysis phase, and one or more of the objects has a recovery base that is a FlashCopy with consistency and there were active units of recovery during the FlashCopy.

csect-name
The name of the control section that issued the message.

hh:mm:ss
The elapsed time for the operation, in hours, minutes, and seconds.

System action

Processing continues.

User response

No action is required.

Severity

0 (informational)

Related reference
RECOVER (Db2 Utilities)

DSNU1561I ***csect-name* - PRELOGA PHASE COMPLETE, ELAPSED TIME=*hh:mm:ss***

Explanation

The RECOVER utility completed the RELOGA phase, and one or more of the objects has a recovery base that is a FlashCopy with consistency and there were active units of recovery during the FlashCopy.

csect-name
The name of the control section that issued the message.

hh:mm:ss
The elapsed time for the operation, in hours, minutes, and seconds.

System action

Processing continues.

User response

No action is required.

Severity

0 (informational)

Related reference
RECOVER (Db2 Utilities)

DSNU1562I ***csect-name*** **- FLASHCOPY** ***dataset-name*** **FOR** ***object-type database-name.tablespace-name*** **HAS BEEN MIGRATED BY HSM**

Explanation

A FlashCopy image copy was chosen by the RECOVER utility as a recovery base, but it has been migrated by HSM.

csect-name
The name of the control section that issued the message.

dataset-name
The name of the data set.

database-name.tablespace-name
The name of the database and table space.

object-type
The type of object.

database-name
The name of the database that is associated with the recovery.

This message has two forms. The short form is shown above. The long form is:

```
csect-name - FLASHCOPY dataset-name FOR
             object-type
database-name.tablespace-name
                DSNUM part-number HAS BEEN
             MIGRATED BY HSM
```

The long form of this message is issued when the specified object is partitioned or has multiple data sets.

part-number
The value that identifies the partition or data set.

System action

The RECOVER utility ignores the SYSCOPY record and looks for and chooses a subsequent image copy as a recover base. The RECOVER utility looks for a local primary or local backup before looking for an older image copy. Sometimes no previous image copies can be used for the recovery. In this case a DSNU510I message is issued with a return code of 8.

User response

Request HSM to recall the data set, and resubmit the RECOVER utility.

Severity

0 (informational)

Related reference
RECOVER (Db2 Utilities)
Related information
DSNU510I
NO RECOVERY BASE AVAILABLE FOR RECOVERY OF *obj-type obj-qual.obj-name*

DSNU1563I ***csect-name*** **- FLASHCOPY** ***dataset-name*** **FOR** ***object-type database-name.tablespace-name*** **DSNUM** ***part-number*** **HAS BEEN DELETED**

Explanation

A FlashCopy image copy chosen by the RECOVER utility as a recovery base has been deleted.

csect-name
The name of the control section that issued the message.

dataset-name
The name of the data set.

database-name.tablespace-name
The name of the database and table space.

object-type
The type of object.

database-name
The name of the database that is associated with the recovery.

part-number
The value that identifies the partition or data set.

System action

The RECOVER utility ignores the SYSCOPY record and looks for another recovery base.

User response

No action is required.

Severity

0 (informational)

Related reference

RECOVER (Db2 Utilities)

DSNU1600I ***csect-name*** **- BACKUP SYSTEM UTILITY FOR** ***object*** **STARTING, COPY POOL =** ***copy-pool-name*****, TOKEN = X'*****token*****'**

Explanation

Backup of the indicated object, either data or logs, to the indicated copy pool and with the indicated token is starting.

System action

Backup of the indicated object has started.

System programmer response

None.

Severity

0 (informational)

DSNU1601I ***csect-name*** **- BACKUP SYSTEM UTILITY IS NOT RESTARTABLE. RESTART IGNORED. A NEW BACKUP WILL BE INITIATED**

Explanation

The BACKUP SYSTEM utility cannot be restarted. The restart is ignored and a new backup is done.

System action

The restart is ignored, and a new BACKUP SYSTEM request is initiated.

System programmer response

None.

Severity

0 (informational)

DSNU1602I ***csect-name*** **- BACKUP SYSTEM UTILITY COMPLETED, ELAPSED TIME =** ***hh:mm:ss***

Explanation

The BACKUP SYSTEM utility cannot be restarted. The restart is ignored, and a new backup is done.

System action

None.

System programmer response

None.

Severity

0 (informational)

DSNU1603I ***csect-name*** **- RESTORE SYSTEM UTILITY RESTART FAILED BECAUSE THE MEMBER-ID,*****member-id*****, ON WHICH THE RESTART HAS BEEN ISSUED IS DIFFERENT FROM THE MEMBER-ID, *****member-id*****, ON WHICH THE RESTORE WAS ORIGINALLY DONE**

Explanation

A group RESTORE in a data sharing environment is already in the log apply phase. The RESTORE was originally issued and owned by a member other than the one that issued the restart, which is not allowed.

System action

The restart fails.

System programmer response

Issue the restart job from the member that was indicated in the message.

Severity

8 (error)

DSNU1604I ***csect-name*** **- RESTORE SYSTEM PHASE LOG APPLY STARTED AT LOG POINT =** ***log-point-value***

Explanation

The RESTORE SYSTEM utility has begun applying logs beginning at the log-point-value in order to arrive at the point in time indicated by the log point at which the logs were truncated via the SYSPITR parameter on the conditional restart command, CRESTART CREATE.

System programmer response

None.

Severity

0 (informational)

DSNU1606I ***csect-name*** **- RESTORE SYSTEM UTILITY STARTING, COPY POOL =** ***copy-pool-name*****, TOKEN = X'*****token*****'**

Explanation

Restore of the indicated copy pool with the indicated token is starting.

System action

None.

System programmer response

None.

Severity

0 (informational)

DSNU1607I ***csect-name*** **- RESTORE SYSTEM UTILITY REQUIRES INSTALL SYSADM AUTHORITY TO RUN. THE CALLER HAS INSUFFICIENT AUTHORITY**

Explanation

The invoker of the RESTORE SYSTEM utility lacks the installation SYSADM authority required to run the utility.

System action

The utility is terminated.

System programmer response

Ensure that the RESTORE SYSTEM utility is run by an administrator with installation SYSADM authority.

Severity

8 (error)

DSNU1608I ***csect-name*** **-** ***system-utility*** **SYSTEM UTILITY FAILED. REQUIRED DFSMSHSM SERVICES NOT AVAILABLE.**

Explanation

The system that attempted to run the BACKUP SYSTEM or RESTORE SYSTEM utility does not have the version of z/OS that contains the version of DFSMSHSM that is required by those utilities.

System action

The utility is terminated.

System programmer response

Ensure that the required version of the z/OS operating system is installed on the system on which the BACKUP SYSTEM and RESTORE SYSTEM utilities are to be run.

Severity

8 (error)

DSNU1609I ***csect-name*** **- BACKUP SYSTEM UTILITY REQUIRES SYSADM OR SYSCTRL AUTHORITY TO RUN. THE CALLER HAS INSUFFICIENT AUTHORITY**

Explanation

The invoker of the BACKUP SYSTEM utility lacks the SYSADM or SYSCTRL authority required to run the utility.

System action

The utility is terminated.

System programmer response

Ensure that the BACKUP SYSTEM utility is run by an administrator with SYSADM or SYSCTRL authority.

Severity

8 (error)

DSNU1610I ***csect-name*** **- AN INCOMPLETE BACKUP SYSTEM HISTORY ENTRY HAS BEEN FOUND IN THE BSDS, INDICATING THERE MAY BE AN INVALID DATA AND LOG VERSION IN COPYPOOL =** ***copy-pool-name*** **FOR TOKEN = X'*****token*****'. DFSMSHSM WILL BE CALLED TO DELETE THE VERSION**

Explanation

During Backup System processing, an incomplete backup history entry was found in the BSDS. For example, an incomplete entry can exist if Db2 or z/OS goes down before backup processing can complete. Such an entry indicates that a data and log version may exist in the indicated copy pool for the indicated token.

System action

Backup System will invoke DFSMShsm to delete the version of the data and logs before proceeding with the current backup.

System programmer response

None.

Severity

0 (informational)

DSNU1611I ***csect-name*** **- A FAILURE HAS OCCURRED DURING BACKUP SYSTEM PROCESSING. DFSMSHSM IS BEING CALLED TO DELETE THE INCOMPLETE VERSION IN COPYPOOL =** ***copy-pool-name*** **FOR TOKEN = X'*token*'**

Explanation

A failure that was previously indicated during Backup System processing has created an incomplete version. The copy pool and token with the incomplete version are indicated in the message text. This incomplete version must be deleted.

System action

Backup System will invoke DFSMShsm to delete the incomplete version.

System programmer response

None.

Severity

0 (informational)

DSNU1612I ***csect-name*** **- RESTORE SYSTEM UTILITY FAILED BECAUSE THE SYSTEM IS NOT IN SYSTEM RECOVER PENDING STATE.**

Explanation

The RESTORE SYSTEM utility cannot be run unless the proper preparations have been made. That preparation includes truncation of logs and performing a conditional restart of the appropriate systems to place them in the System RECOVER PENDING state.

System action

The utility is terminated.

System programmer response

Complete the required preparations and retry the RESTORE SYSTEM utility.

Severity

8 (error)

Related concepts

Recovery of data to a prior point in time (Db2 Administration Guide)

Point-in-time recovery (Db2 Utilities)

System-level point-in-time recovery (Db2 Data Sharing Planning and Administration)

Related tasks

Preparing to recover to a prior point of consistency (Db2 Administration Guide)

Related reference

RESTORE SYSTEM (Db2 Utilities)

DSNU1614I ***csect-name*** **- BACKUP SYSTEM UTILITY FOR** ***object-nameobject*** **COMPLETED SUCCESSFULLY, COPY POOL =** ***copy-pool-name*****, TOKEN = X'*token-value*', DATA COMPLETE LRSN = X'*lrsn-value*', ELAPSED TIME =** ***elapsed-time***

Explanation

The backup of the indicated object, data or logs, has completed successfully.

csect-name
The name of the control section that issued the message.

object-name
The identifier of the object that was backed up.

copy-pool-name
The name of the copy pool.

token-value
The TOKEN value that was specified in the utility control statement.

lrsn-value
The RBA or LRSN of the last log record written to the active log data sets after the backup of the database copy pool was complete. Note that the same data complete LRSN value is reported in the DSNU1614I messages for the data and logs. When you copy both the database and log copy pools use this data complete LRSN as the log truncation point for the conditional restart of Db2 for system recovery to a point in time if the log copy pool is restored, or for cloned systems created with a system-level backup.

elapsed-time
The elapsed time of the utility in hours, minutes, and seconds, shown in the following format: *hh:mm:ss*

System action

Processing continues.

System programmer response

When this message is issued for the database copy pool, capture the data complete LRSN. You can use the LRSN to determine the following information:

- Which system-level backup is used by RESTORE SYSTEM during system point in time recovery. The RESTORE SYSTEM utility chooses a system-level backup (for the restore of the database copy pool) when the data complete LRSN is less than the SYSPITR log point.
- The CRESTART ENDRBA, ENDLRSN, or SYSPITR log truncation point for conditional restart of Db2 when the log copy pool has been restored outside of Db2
- The CRESTART ENDRBA or ENDLRSN for the conditional restart of Db2 for cloned systems

You can use the Print Log Map Utility, DSNJU004, to print information for system-level backups, including the data complete LRSN. For a data sharing systems, invoke DSNJU004 on the BSDS for the member where the backup was invoked.

For a conditional restart of Db2, use the Change Log Inventory Utility, DSNJU003, to create the conditional restart record (CRESTART).

Severity

0 (informational)

Related concepts

How RBA and LRSN values are displayed (Db2 Administration Guide)

Related reference

BACKUP SYSTEM (Db2 Utilities)

RESTORE SYSTEM (Db2 Utilities)

DSNJU004 (print log map) (Db2 Utilities)

DSNJU003 (change log inventory) (Db2 Utilities)

DSNU1615I **DUMPONLY WAS SPECIFIED, BUT NO SYSTEM-LEVEL BACKUP CORRESPONDING TO THE TOKEN EXISTS**

Explanation

The request to dump a specific system-level backup to tape has failed because either:

- A system-level backup with the specified token does not exist, or
- The DASD version of the system-level backup is invalid

System action

BACKUP SYSTEM processing terminates without dumping the system-level backup to tape.

System programmer response

Issue the DFSMShsm LIST COPYPOOL command with the ALLVOLS option for the Db2 database copy pool. Run the Print Log Map Utility (DSNJU004) to print the system-level backup information. If data sharing, ensure that the system-level backup information from all members is gathered. Locate the system-level backup information in the DSNJU004 output and compare it with the output from the LIST COPYPOOL command.

Severity

8 (error)

DSNU1616I ***csect-name*** **- THE CALL TO DFSMShsm TO RESTORE SYSTEM FAILED. PLEASE SEE MESSAGE ARC1806E IN THE OUTPUT FOR DETAILS. COPY POOL =** ***copy-pool-name*****, TOKEN = X'*****token*****'. A RETRY WILL BE ATTEMPTED IF AN APPROPRIATE BACKUP VERSION CAN BE IDENTIFIED.**

Explanation

The call to DFSMShsm to RESTORE SYSTEM with the indicated copy pool name and token failed during DFSMShsm processing. DFSMSHSM will have issued message ARC1806E indicating the cause of the error. This message can be found in the job log of the RESTORE SYSTEM utility.

If this is the first attempt by the RESTORE SYSTEM utility to do the RESTORE, a second attempt will be made if there is another appropriate Backup version recorded in the BACKUP SYSTEM history BSDS record. An appropriate Backup version is one for which data backup completed before the log truncation point indicated in the SYSPITR parameter of the conditional restart command, CRESTART CREATE. Messages indicating the progress of a subsequent attempt will be issued, just as for the first attempt.

If the second attempt fails, no further attempts will be made and the request will be failed.

System action

If this is the first attempt to do the RESTORE and there is another appropriate Backup available, a second attempt will be made. Otherwise the utility will terminate.

System programmer response

Correct the problem identified in message ARC1806E and rerun the utility.

Problem determination

The job log will contain the ARC1806E message that is issued by DFSMShsm. This message will contain information indicating the cause of the failure in DFSMShsm.

Severity

8 (error)

DSNU1618I ***csect-name*** **- RESTORE SYSTEM UTILITY FAILED BECAUSE THERE ARE NO BACKUP SYSTEM HISTORY ENTRIES IN THE BSDS**

Explanation

No BACKUP SYSTEM history entries exist in the BSDS. Without these records, the RESTORE SYSTEM utility cannot restore the system. Backups of the target systems must be taken before any restore operations can be done.

csect-name
The name of the control section that issued the message.

If you ran RESTORE SYSTEM with the FROMDUMP option, references in this message to BACKUP SYSTEM history entries refer only to history entries for backups that were dumped to tape.

System action

The utility terminates.

System programmer response

None.

Severity

8 (error)

Related reference

RESTORE SYSTEM (Db2 Utilities)

DSNU1619I ***csect-name*** **- RESTORE SYSTEM UTILITY FAILED, BECAUSE THERE ARE NO BACKUP SYSTEM HISTORY ENTRIES IN THE BSDS WITH A DATA COMPLETION LRSN/RBA PRIOR TO THE LOG TRUNCATION POINT**

Explanation

The RESTORE SYSTEM utility failed, because the logs have been truncated to a point before which any backups are available.

csect-name
The name of the control section that issued the message.

BACKUP SYSTEM history entries exist in the BSDS. However, none of them indicate a data backup completion LRSN or RBA with a value less than the log truncation point. The log truncation point is indicated in the SYSPITR parameter of the conditional restart command, CRESTART CREATE, that is used to truncate the logs.

If you ran RESTORE SYSTEM with the FROMDUMP option, references in this message to BACKUP SYSTEM history entries refer only to history entries for backups that were dumped to tape.

System action

The utility terminates.

Severity

8 (error)

Related concepts

Point-in-time recovery with system-level backups (Db2 Administration Guide)

A conditional restart control record (Db2 Utilities)

How RBA and LRSN values are displayed (Db2 Administration Guide)

Related tasks

Managing the log and the bootstrap data set (Db2 Administration Guide)

Related reference

BACKUP SYSTEM (Db2 Utilities)

RESTORE SYSTEM (Db2 Utilities)

DSNU1621I ***csect-name*** **-** ***utility-name*** **UTILITY FAILED BECAUSE THE SYSTEM IS IN SYSTEM RECOVER-PENDING STATE**

Explanation

When the system is in RECOVER-PENDING state, no utility other than RESTORE is allowed to run. An attempt was made to run a utility while the system was in RECOVER-PENDING state.

System action

The utility is terminated.

System programmer response

Review the need to run the utility and, if appropriate, resubmit your job after the system has been restored.

Severity

8 (error)

DSNU1623I ***csect-name*** **- THE TERM UTILITY REQUEST IS REJECTED BECAUSE THE SYSTEM IS IN SYSTEM RECOVER PENDING STATE**

Explanation

The TERM request is rejected. The only utility that is allowed to run while the system is in the system RECOVER pending state is the RESTORE utility.

System action

The TERM request is ignored.

Severity

4 (warning)

DSNU1624I ***csect-name - system-utility*** **SYSTEM UTILITY FAILED BECAUSE ONE OR MORE NON-DORMANT MEMBERS ARE IN A FAILED OR NOT NORMALLY QUIESCED STATE. THOSE MEMBERS ARE:** ***member-id***

Explanation

The BACKUP or RESTORE of the members of a data sharing group requires that all members be active or normally quiesced. If any members are found not to be in either of these states, the BACKUP or RESTORE cannot continue.

System action

The utility is terminated.

System programmer response

Determine why these systems are in a problem state, and whether they can be moved out of this state. Once all members have been returned to either the active or normally quiesced state, resubmit the job.

Severity

8 (error)

DSNU1626I ***csect-name - system-utility*** **SYSTEM UTILITY FAILED BECAUSE RESTORE SYSTEM IS ALREADY RUNNING OR ANOTHER TASK IS PROCESSING IN A MANNER THAT PREVENTS THIS TASK FROM SERIALIZING PROPERLY**

Explanation

The attempt to acquire the serialization lock failed. In the case of RESTORE SYSTEM, this can only occur if RESTORE SYSTEM is already running. In the case of BACKUP SYSTEM, this can occur if any of the following events are in process:

- System checkpoint
- Data set extensions
- Writing 32K pages
- Writing close page set control log records (PSCRs)
- Creating data sets (for table spaces, indexes, and so on)
- Deleting data sets (for dropping tables spaces, indexes, and so on)
- Renaming data sets (for online reorganizing of table spaces, indexes, and so forth during the switch phase)

System action

The utility is terminated.

System programmer response

If it is the RESTORE SYSTEM utility that is being invoked, the only other utility that can be running is RESTORE SYSTEM. If it is the BACKUP SYSTEM utility that is being invoked, any system activity that provokes any of the processes listed in the Explanation above could be the cause of the failure. If possible, determine which utility is responsible and resubmit this job once that utility completes. You may also resubmit your job at a later, less busy time.

Severity

8 (error)

DSNU1627I ***csect-name*** **- RESTORE SYSTEM PRE-LOG APPLY COMPLETED SUCCESSFULLY, COPY POOL =** ***copy-pool-name*** **TOKEN = X'*token*' ELAPSED TIME =** ***hh:mm:ss*****.**

Explanation

Restoration of the data from the indicated copy pool with the indicated token has completed successfully.

System action

Continue with log apply phase.

System programmer response

None.

Severity

0 (informational)

DSNU1628I ***csect-name*** **- RESTORE SYSTEM PHASE LOG APPLY COMPLETED, ELAPSED TIME =** ***hh:mm:ss***

Explanation

The log apply phase of the RESTORE SYSTEM completed in the amount of time that was indicated.

Severity

0 (informational)

DSNU1629I ***csect-name*** **- DB2 PUT ONE OR MORE OBJECTS INTO THE RECOVER-PENDING STATE, REBUILD-PENDING STATE, OR LOGICAL PAGE LIST DURING THE LOG APPLY PHASE.**

Explanation

During log apply processing, objects were put into one of the exception states that are listed in the message. Before these objects can be used, you must process them after the restore completes.

csect-name
The name of the control section that issued the message.

System action

Processing continues.

System programmer response

Process those objects in the RECOVER-pending state or REBUILD-pending state with the RECOVER utility or REBUILD utility as appropriate.

To recover pages from the LPL, use the START DATABASE command with the SPACENAM option, the RECOVER utility, or the LOAD utility.

Problem determination

Use the DISPLAY DATABASE command to identify which objects are in the exception states that are indicated in the message.

Severity

4 (warning)

Related concepts

Recovery of pages on the logical page list (Db2 Data Sharing Planning and Administration)

Related tasks

Removing pages from the logical page list (Db2 Administration Guide)

Related reference

RECOVER-pending status (Db2 Utilities)

REBUILD-pending status (Db2 Utilities)

-DISPLAY DATABASE (Db2) (Db2 Commands)

DSNU1630I ***csect-name*** **BACKUP SYSTEM UTILITY FAILED, BECAUSE action FCINCREMENTAL WAS SPECIFIED BUT THE INCREMENTAL FLASHCOPY COULD NOT BE PROCESSED**

Explanation

This message is issued when all of the following conditions exist:

- The database copy pool has been defined with more than one DASD version.
- A persistent incremental FlashCopy relationship already exists for the database copy pool.
- The next version or backup of the database copy pool to be taken is for a full FlashCopy rather than an incremental FlashCopy.

If the action specified is ESTABLISH, then a persistent incremental FlashCopy relationship already exists for the database copy pool.

If the action specified is END, then the persistent incremental FlashCopy relationship cannot be ended because the next version of the database copy pool to be taken is for a full FlashCopy, rather than for the incremental FlashCopy.

System programmer response

Remove the ESTABLISH FCINCREMENTAL option or the END FCINCREMENTAL option and rerun the BACKUP SYSTEM utility job. This will create a full FlashCopy of the database copy pool. It will also create the log copy pool if the FULL option was specified.

If you specified ESTABLISH FCINCREMENTAL and it is important based on your schedule of backing up your system for this invocation of the BACKUP SYSTEM utility to create a system-level backup that's copy of the database copy pool is an incremental FlashCopy, then analyze the following:

- The job output from the last couple of invocations of the BACKUP SYSTEM utility. Look for message DSNU1639I.
- The output from the DFSMShsm LIST COPYPOOL command for the database copy pool.
- The output from the print log map utility (DSNJU004) for the system-level backup information. Look for system-level backups with TYPE=I.

If you specified END FCINCREMENTAL, then remove these keywords until the next backup version of the database copy pool to be taken is the version associated with the persistent incremental FlashCopy relationship. END FCINCREMENTAL can only be specified to take a last incremental FlashCopy and withdraw the persistent incremental FlashCopy relationship when the backup version to be taken is the incremental FlashCopy relationship.

Severity

8 (error)

Related reference

BACKUP SYSTEM (Db2 Utilities)

DSNJU004 (print log map) (Db2 Utilities)

Related information

DSNU1639I

csect-name THE SYSTEM LEVEL BACKUP TAKEN IS AN INCREMENTAL FLASHCOPY OF THE DATABASE COPY POOL

DSNU1631I ***csect-name* - *utility-name* SYSTEM UTILITY FAILED BECAUSE THE CALL TO DFSMSHSM FAILED WITH RC = X' *return-code*', REASON = X'*reason-code*'. SEE THE HSM ACTIVITY LOG FOR HSM MESSAGES INDICATING THE CAUSE OF ERROR**

Explanation

The call to DFSMShsm to perform the backup or the restore of the copy pools failed with the return code and reason code indicated in the message.

csect-name
The name of the control section that issued the message.

utility-name
The name of the system utility that failed.

return-code
The return code issued by DFSMShsm. This value indicates which message to look for in the HSM job log:

X'6'
Look for message ARC1806E.

X'66'
Look for message ARC1866I.

X'8' or higher
Look for message ARC1808E.

reason-code
The Db2 reason code value that indicates the reason for the failure. For explanations of reason codes, see Db2 reason codes (Db2 Codes).

System action

The utility is terminated.

System programmer response

Look up the return code and reason code in the DFSMShsm documentation, and take the appropriate action. Examine the HSM job log. In some cases, the HSM job log contains messages that indicate the cause of the error.

Problem determination

The HSM log does not have information for every error. If the HSM log does not have information for this error, use the reason code and return code to diagnose the problem.

Severity

8 (error)

Related reference

BACKUP SYSTEM (Db2 Utilities)

RESTORE SYSTEM (Db2 Utilities)

ARC messages (MVS System Messages)

ARC return codes and reason codes (MVS System Messages)

DSNU1632I ***csect-name*** **- DISPLAY REQUEST WITH MEMBER SPECIFICATION WAS MADE BUT THE SYSTEM IS IN SYSTEM RECOVER-PENDING STATE. THE MEMBER SPECIFICATION IS IGNORED AND ONLY THOSE UTILITIES RUNNING ON THE SYSTEM FROM WHICH THE DISPLAY COMMAND WAS ISSUED WILL BE DISPLAYED**

Explanation

When a system is in the system RECOVER-PENDING state it isn't possible to determine which utilities are executing on members in a data sharing group other than the member on which the DISPLAY command is running. The MEMBER specification is ignored and only those utilities executing on the system on which the command is running are displayed.

System action

Display any utilities running on the system on which the command is running.

Severity

0 (informational)

DSNU1633I ***csect-name*** **- BACKUP SYSTEM UTILITY FAILED BECAUSE UNABLE TO WRITE BSDS RECORD DUE TO VSAM ERROR: RC = X'*return code*', RSN = X'*reason code***

Explanation

The attempt to update or insert the BACKUP SYSTEM history BSDS record failed due to an error during VSAM processing. The VSAM return and reason codes are indicated in the message.

System action

The utility is terminated.

System programmer response

The return and reason code in the message will identify the VSAM error that occurred when attempting to write out the BSDS record. Correct the problem and resubmit the job.

Severity

8 (error)

DSNU1634I ***csect-name*** **- RESTORE SYSTEM UTILITY FAILED BECAUSE THE SYSTEM IS IN TRACKER MODE AND LOGONLY WAS NOT SPECIFIED**

Explanation

The RESTORE SYSTEM utility cannot be run on a tracker system unless the LOGONLY keyword is specified.

System programmer response

Change the RESTORE SYSTEM utility control statements to include the LOGONLY parameter.

Severity

8 (error)

DSNU1635I ***csect-name*** **THE RBA RANGE FOR THE LAST CHECKPOINT ISSUED DURING THE LOGAPPLY PHASE OF THE RESTORE SYSTEM UTILITY IS START_RBA = X'*yyyyyyyyyyyy*' END_RBA = X'*zzzzzzzzzzzz*' FOR MEMBER *mmmm***

Explanation

This message displays the RBA range of the last checkpoint issued by the RESTORE SYSTEM utility. You can use the RBA range as input to DSN1LOGP to print log records that show which objects were affected by the RESTORE SYSTEM utility. The subsystem name of the member is issued only for systems in data sharing mode.

System programmer response

If you suspect a problem, run the DSN1LOGP stand-alone utility to verify which objects were affected by the RESTORE SYSTEM utility.

Severity

0 (informational)

Related concepts

How RBA and LRSN values are displayed (Db2 Administration Guide)

DSNU1636I **RESTORE SYSTEM UTILITY FAILED BECAUSE THE SPECIFIED DUMPCLASS IS NOT KNOWN TO DFSMSHSM**

Explanation

The RESTORE SYSTEM Utility failed to restore the Db2 database copy pool because the DFSMShsm dump pclass specified does not exist for the system-level backup. Specify the DFSMShsm dump class via the RESTORE SYSTEM DUMPCLASS option or via installation panel DSNTIP6 by specifying RESTORE/RECOVER From dump => YES and DUMP CLASS NAME => hsm-dumpclass-nm.

System action

The RESTORE SYSTEM Utility terminates processing.

System programmer response

Issue the DFSMShsm LIST COPYPOOL command with the ALLVOLS option for the Db2 database copy pool. Run the Print Log Map Utility (DSNJU004) to print the system-level backup information. If data sharing, ensure that the system-level backup information from all members is gathered. Locate the systemlevel backup information in the DSNJU004 output and compare it with the output from the LIST COPYPOOL command. The LIST COPYPOOL command output shows the DFSMShsm dump classes associated with each system-level backup.

Severity

8 (error)

DSNU1637I **RESTORE SYSTEM UTILITY FAILED BECAUSE NO FLASHCOPY IS AVAILABLE**

Explanation

The RESTORE SYSTEM utility could not restore the Db2 database copy pool because the DASD version of the system-level backup is unavailable.

System action

RESTORE SYSTEM terminates processing.

System programmer response

Issue the DFSMShsm LIST COPYPOOL command with the ALLVOLS option for the Db2 database copy pool. Run the DSNJU004 (print log map) utility to print the system-level backup information. For a data sharing environment, gather the system-level backup information from all members. Locate the system-level backup information in the DSNJU004 output and compare it with the output from the LIST COPYPOOL command.

If the system-level backup was dumped to tape, you can use either of the following options to direct the utility to use the copy of the system-level backup on tape:

- Specify the FROMDUMP option in the RESTORE SYSTEM utility control statement.
- Set the RESTORE_ RECOVER_FROMDUMP subsystem parameter to YES

Severity

8 (error)

Related reference

DSNJU004 (print log map) (Db2 Utilities)

LIST command (z/OS DFSMShsm Storage Administration Reference)

Syntax and options of the RESTORE SYSTEM control statement (Db2 Utilities)

RESTORE/RECOVER field (RESTORE_ RECOVER_FROMDUMP subsystem parameter) (Db2 Installation and Migration)

DSNU1638I **RESTORE SYSTEM UTILITY FAILED BECAUSE NO FLASHCOPY IS AVAILABLE**

Explanation

The DFSMShsm LIST COPYPOOL command issued by the RESTORE SYSTEM Utility has failed. The information from the LIST COPYPOOL command is required to correctly restore system-level backups that have been dumped to tape.

System action

The RESTORE SYSTEM Utility terminates processing.

System programmer response

Refer to the DFSMShsm manuals using the return code and reason code to determine why the LIST COPYPOOL command failed and correct the problem. You can execute the RESTORE SYSTEM Utility again after correcting the problem.

Severity

8 (error)

DSNU1639I ***csect-name*** **THE SYSTEM LEVEL BACKUP TAKEN IS AN INCREMENTAL FLASHCOPY OF THE DATABASE COPY POOL**

Explanation

This message indicates that the system level backup that was created by the BACKUP SYSTEM utility is an incremental FlashCopy of the database copy pool. This indicates that, in most cases, the background copy will complete faster than the background copy for a full copy.

System programmer response

You might have to take action if an incremental copy was not expected. Run a LIST COPYPOOL command and run the print log map (DSNJU004) utility.

Severity

0 (informational)

DSNU1640I ***csect-name*** **- Z/OS DFSORT LOAD MODULE NOT LOADED.**

Explanation

The z/OS DFSORT load module was not located in the system search order.

System action

Utility processing is terminated.

Operator response

Notify the system programmer.

System programmer response

Verify that the system is configured to allow Db2 to use DFSORT load modules. If DFSORT is not installed as the primary z/OS sort product, make the DFSORT SORTLPA and SICELINK libraries available for use by Db2 utilities.

Severity

8 (error)

Related reference

SORT LIBRARY field (Db2 Installation and Migration)

DSNU1645I **VALUE MISSING FROM THE SYSVALUEDDN DATA SET ASSOCIATED WITH** ***vcat-specification***

Explanation

A row in the SYSVALUEDDN data set does not contain a complete specification of the integrated catalog facility (ICF) alias names (VCAT). Both the previous and current alias names must be specified.

vcat-specification
The alias names specified in a row of the SYSVALUEDDN data set.

The specification is a pair of integrated catalog facility (ICF) aliases separated with a comma.

System action

The utility terminates.

System programmer response

Correct the row in the SYSVALUEDDN data set indicated by *vcat-specification* and resubmit the job.

Severity

8 (error)

Related concepts

While running RESTORE SYSTEM (Db2 Utilities)

DSNU1646I **AN INVALID CHARACTER** ***char*** **WAS SPECIFIED ON THE LINE CONTAINING** ***vcat-specification*** **IN THE SYSVALUEDDN DATA SET**

Explanation

A row in the SYSVALUEDDN data set contains an invalid character.

char
The invalid character in the SYSVALUEDDN data set.

vcat-specification
The record in the SYSVALUEDDN data set that specifies the previous and current integrated catalog facility (ICF) alias names.

System action

The utility terminates.

System programmer response

Correct the character in the row of the SYSVALUEDDN data set indicated by *vcat-specification* and resubmit the job.

Severity

8 (error)

Related concepts

While running RESTORE SYSTEM (Db2 Utilities)

DSNU1647I **A MATCH FOR *vcat-name* COULD NOT BE FOUND IN SYSVALUEDDN WHILE PROCESSING LOG RECORD FOR PAGE SET *object-qualifier.object-name* WITH DBID *database-id* AND PSID *pageset-id***

Explanation

An integrated catalog facility (ICF) alias name in a log record does not match any found in the SYSVALUEDDN data set.

vcat-name
The name of an integrated catalog facility (ICF) alias specified in SYSVALUEDDN.

object-qualifier.object-name
The qualified name of the object referenced in the log record.

database-id
The DBID of the object referenced in the log record.

pageset-id
The PSID of the object referenced in the log record.

System action

The utility abends with completion code X'04E' and reason code X'00E40106'.

System programmer response

Add a row in the SYSVALUEDDN data set to specify the mapping for *vcat-name* and resubmit the job.

Related concepts
While running RESTORE SYSTEM (Db2 Utilities)

DSNU1648I **RESTORE SYSTEM UTILITY FAILED. THE AVAILABLE BACKUP IS NOT USABLE BEYOND THE SIX BYTE LOGGING LIMIT AFTER THE BSDS HAS BEEN CONVERTED.**

Explanation

The RESTORE SYSTEM utility was unable to use the available backup because it was taken before the BSDS was converted and the 6-byte logging limit was reached on this system.

System action

Processing terminates.

User response

This system can be restored only from this backup with a subsystem parameter setting of RESTORE_RECOVER_FROMDUMP = YES, which is typically used only at disaster recovery sites.

Severity

8 (error)

Related reference
RESTORE SYSTEM (Db2 Utilities)

DSNU1702I ***csect-name* - LOB PAGE TYPE MISMATCH. ROWID *rowid* VERSION *version* PAGE *page-number* EXPECTED TYPE *bit-value* ACTUAL TYPE *bit-value***

Explanation

A LOB page with page number *page-number* has an unexpected page type specification. In the expected and actual page types, *bit-value* is a 3-bit value. The expected values can be B'100' for a LOB map page or B'110' for a LOB data page. The LOB page in error is part of the LOB with the ROWID *rowid* and version *version*.

System action

If SHRLEVEL REFERENCE was specified or defaulted, then the LOB table space status is set to CHECK Pending (CHKP). If SHRLEVEL CHANGE was specified, then the table space status remains unchanged.

System programmer response

Notify IBM Software Support.

User response

Notify the system programmer.

Severity

4

DSNU1703I ***csect-name* - LOB PAGE TYPE MISMATCH. PAGE *page-number* EXPECTED TYPE *bit-value* ACTUAL TYPE *bit-value***

Explanation

A LOB page with page number *page-number* has an unexpected page type specification. In the expected and actual page types, *bit-value* is a 3-bit value. The expected values can be B'001' for a LOB high-level space map, or B'011' for a LOB low-level space map.

System action

If SHRLEVEL REFERENCE was specified or defaulted, then the LOB table space status is set to CHECK Pending (CHKP). If SHRLEVEL CHANGE was specified, then the table space status remains unchanged.

System programmer response

Notify IBM Software Support.

User response

Notify the system programmer.

Severity

4

DSNU1704I ***csect-name*** **- UNEXPECTED PAGE TYPE. ROWID** ***rowid*** **VERSION** ***version*** **PAGE** ***page-number*** **ACTUAL PAGE TYPE** ***bit-value***

Explanation

A LOB page with page number *page-number* has an unexpected page type specification. In the actual page type, *bit-value* is a 3-bit value. At the time of processing, the CHECK LOB utility expected either B'100' for a LOB map page or B'110' for a LOB data page. The LOB page in error is part of the LOB with the ROWID *rowid* and version *version*.

System action

If SHRLEVEL REFERENCE was specified or defaulted, then the LOB table space status is set to CHECK Pending (CHKP). If SHRLEVEL CHANGE was specified, then the table space status remains unchanged.

System programmer response

Notify IBM Software Support.

User response

Notify the system programmer.

Severity

4

DSNU1706I ***csect-name*** **- PAGE** ***page-number*** **MISSING IN LOB MAP. ROWID** ***rowid*** **VERSION** ***version***

Explanation

A low-level space map, indicates that the LOB page with page number *page-number* is allocated to the LOB with the ROWID *rowid* and version *version*. The LOB map for the specified LOB does not include the specified page.

System action

If SHRLEVEL REFERENCE was specified or defaulted, then the LOB table space status is set to CHECK Pending (CHKP). If SHRLEVEL CHANGE was specified, then the table space status remains unchanged.

System programmer response

Notify IBM Software Support.

User response

Notify the system programmer.

Severity

4

DSNU1708I ***csect-name*** **- LOB MAP PAGE** ***page-number*** **MISSING. ROWID** ***rowid*** **VERSION** ***version***

Explanation

A low-level space map indicates that the LOB map page with page number *page-number* is allocated to the LOB with the ROWID *rowid* and version *version*. The CHECK LOB utility was unable to verify the existence of this page.

System action

If SHRLEVEL REFERENCE was specified or defaulted, then the LOB table space status is set to CHECK Pending (CHKP). If SHRLEVEL CHANGE was specified, then the table space status remains unchanged.

System programmer response

Notify IBM Software Support.

User response

Notify the system programmer.

Severity

4

DSNU1710I ***csect-name*** **- LOB PAGE ALLOCATED TO A DIFFERENT LOB. PAGE** ***page-number*** **IS IN THE LOB MAP OF ROWID** ***rowid1*** **VERSION** ***version1*****. LOW-LEVEL SPACE MAP INDICATES THE PAGE BELONGS**

TO ROWID *rowid2* VERSION *version2*

Explanation

The LOB page with page number *page-number*, is in the LOB map of the LOB with ROWID *rowid1* and version *version1*. A low-level space map indicates that the page belongs to different LOB with ROWID *rowid2* and version *version2*. The page can be a data page or a LOB map page.

System action

If SHRLEVEL REFERENCE was specified or defaulted, then the LOB table space status is set to CHECK Pending (CHKP). If SHRLEVEL CHANGE was specified, then the table space status remains unchanged.

System programmer response

Notify IBM Software Support.

User response

Notify the system programmer.

Severity

4

DSNU1712I ***csect-name* - LOB DATA LENGTH INCORRECT. ROWID *rowid* VERSION *version* EXPECTED LENGTH *hex-value1* ACTUAL LENGTH *hex-value2***

Explanation:
The actual sum of the data lengths in the LOB data pages, *hex-value2*, does not match the expected value specified in the LOB map page, *hex-value1*. The LOB in error is identified by ROWID *rowid* and version *version*.

System action

If SHRLEVEL REFERENCE was specified or is the default, the LOB table space status is set to CHECK pending (CHKP). If SHRLEVEL CHANGE was specified, the table space status remains unchanged.

System programmer response

Notify IBM Support.

User response

Notify the system programmer.

Severity

4

DSNU1714I ***csect-name* - LOB MAP PAGE COUNT INCORRECT. ROWID *rowid* VERSION *version* EXPECTED COUNT *hex-value1* ACTUAL COUNT *hex-value2***

Explanation

The actual count of data pages, *hex-value1*, does not match the expected number of pages, *hex-value2*, that is specified in the LOB map page. The LOB in error is identified by ROWID *rowid* and version *version*.

System action

If SHRLEVEL REFERENCE was specified or defaulted, then the LOB table space status is set to CHECK Pending (CHKP). If SHRLEVEL CHANGE was specified, then the table space status remains unchanged.

System programmer response

Notify IBM Software Support.

User response

Notify the system programmer.

Severity

4

DSNU1716I ***csect-name* - NEWER VERSION EXISTS FOR LOB. ROWID *rowid* VERSION *version***

Explanation

The LOB table space contains a newer LOB version for the LOB that is identified by ROWID *rowid* and version *version*. The newer LOB has the same ROWID, *rowid*, but a higher VERSION number. The LOB that is identified by the message is reported as an orphan LOB by the CHECK DATA utility. Other than occupying space in the LOB table space, the presence of orphan LOBs does not hinder LOB processing.

System action

CHECK LOB utility processing continues. Utility returns completion code=0.

User response

The LOB can be deleted using REPAIR LOCATE ROWID VERSION DELETE.

Severity

0

DSNU1720I ***csect-name* - PAGE *page-number* IN LOB MAP IS MISSING A LOW-LEVEL SPACE MAP ENTRY. ROWID *rowid* VERSION *version***

Explanation

The LOB page that is specified by *page-number* is in the LOB map of the LOB with the ROWID *rowid* and version *version*, but is not allocated in any low-level space map entry.

System action

If SHRLEVEL REFERENCE was specified or defaulted, then the LOB table space status is set to CHECK Pending (CHKP). If SHRLEVEL CHANGE was specified, then the table space status remains unchanged.

System programmer response

Notify IBM Software Support.

User response

Notify the system programmer.

Severity

4

DSNU1722I ***csect-name* - LOB PAGE CHECK BYTE MISMATCH. ROWID *rowid* VERSION *version* PAGE *page-number* EXPECTED BYTE *hex-value1* ACTUAL BYTE *hex-value2***

Explanation

The actual check byte from the specified LOB data page, *hex-value2*, does not match the expected check byte, *hex-value1*, from the LOB map page of LOB with the ROWID *rowid* and version *version*.

System action

If SHRLEVEL REFERENCE was specified or defaulted, then the LOB table space status is set to CHECK Pending (CHKP). If SHRLEVEL CHANGE was specified, then the table space status remains unchanged.

System programmer response

Notify IBM Software Support.

User response

Notify the system programmer.

Severity

4

DSNU1724I ***csect-name* - *page-type* PAGE NUMBER MISMATCH. ROWID *rowid* VERSION *version* EXPECTED PAGE NUMBER *expected-number* ACTUAL PAGE NUMBER *actual-number***

Explanation

A LOB page had a page number, *actual-number*, other than the expected number, *expected-number*. The page belongs to the LOB with the ROWID *rowid* and version *version*. *page-type* specifies the type of page that was expected: 'LOB MAP' for an expected LOB map, or 'LOB DATA/MAP' for a page that could be a LOB map or a data page.

System action

If SHRLEVEL REFERENCE was specified or defaulted, then the LOB table space status is set to CHECK Pending (CHKP). If SHRLEVEL CHANGE was specified, then the table space status remains unchanged.

System programmer response

Notify IBM Software Support.

User response

Notify the system programmer.

Severity

4

DSNU1725I ***csect-name* - *page-type* PAGE NUMBER MISMATCH. EXPECTED PAGE NUMBER *expected-number* ACTUAL PAGE NUMBER *actual-number***

Explanation

A LOB page had a page number, *actual-number*, other than the expected number, *expected-number*. *page-type* specifies the type of page that is expected: 'HIGH-LEVEL SPACE MAP' or 'LOW-LEVEL SPACE MAP'.

System action

If SHRLEVEL REFERENCE was specified or defaulted, then the LOB table space status is set to CHECK Pending (CHKP). If SHRLEVEL CHANGE was specified, then the table space status remains unchanged.

System programmer response

Notify IBM Software Support.

User response

Notify the system programmer.

Severity

4

DSNU1726I ***csect-name* ZERO PAGE ENCOUNTERED *page-type* PAGE *page-number* ROWID *rowid* VERSION *version***

Explanation

Page numbered *page-number* is a zero page. The page belongs to the LOB with the ROWID *rowid* and version *version*. *page-type* specifies the type of page that is expected: 'LOB MAP' for a LOB map, or 'LOB DATA/MAP' for a LOB map or a data page.

System action

If SHRLEVEL REFERENCE was specified or defaulted, then the LOB table space status is set to CHECK Pending (CHKP). If SHRLEVEL CHANGE was specified, then the table space status remains unchanged.

System programmer response

Notify IBM Software Support.

User response

Notify the system programmer.

Severity

4

DSNU1727I ***csect-name* ZERO PAGE ENCOUNTERED *page-type* PAGE *page-number***

Explanation

Page numbered *page-number* is a zero page. While only the page header information was found to be zero, generally, the entire page will be zero. *page-type* specifies the type of page expected: 'HIGH-LEVEL SPACE MAP' or 'LOW-LEVEL SPACE MAP'.

System action

If SHRLEVEL REFERENCE was specified or defaulted, then the LOB table space status is set to CHECK Pending (CHKP). If SHRLEVEL CHANGE was specified, then the table space status remains unchanged.

System programmer response

Notify IBM Software Support.

User response

Notify the system programmer.

Severity

4

DSNU1728I ***csect-name* - *page-type* PAGE FROM LOB MAP IS MISSING. ROWID *rowid* VERSION *version***

Explanation

A page is in the LOB map of the LOB with the ROWID *rowid* and version *version*, but is not present in the LOB table space. *page-type* specifies the type of missing page, 'LOB MAP' for an addition LOB map or 'LOB DATA/MAP' for a page that could be a LOB map or a data page.

System action

If SHRLEVEL REFERENCE was specified or defaulted, then the LOB table space status is set to CHECK Pending (CHKP). If SHRLEVEL CHANGE was specified, then the table space status remains unchanged.

System programmer response

Notify IBM Software Support.

User response

Notify the system programmer.

Severity

4

DSNU1730I ***csect-name* - LOB MAP PAGE *page-number* CONTAINS ROWID *rowid1* VERSION *version1* BUT LOW-LEVEL SPACE MAP CONTAINS ROWID *rowid2* VERSION *version2***

Explanation

The LOB map page of a LOB contains the ROWID *rowid1* and version *version1* but the low-level space map indicates that the LOB map page contains the ROWID *rowid2* and version *version2*. The ROWID and version must match.

System action

If SHRLEVEL REFERENCE was specified or defaulted, then the LOB table space status is set to CHECK Pending (CHKP). If SHRLEVEL CHANGE was specified, then the table space status remains unchanged.

System programmer response

Notify IBM Software Support.

User response

Notify the system programmer.

Severity

4

DSNU1732I ***csect-name*** **- PAGE** ***page-number*** **IN LOB MAP HAS AN UNALLOCATED OR DEALLOCATED LOW-LEVEL SPACE MAP ENTRY. ROWID** ***rowid*** **VERSION** ***version***

Explanation

The LOB map of the LOB with the ROWID *rowid* and version *version*, indicates that page *page-number* is part of the LOB. The low-level space map entry for the page indicates that the page is unallocated or deallocated.

System action

If SHRLEVEL REFERENCE was specified or defaulted, then the LOB table space status is set to CHECK Pending (CHKP). If SHRLEVEL CHANGE was specified, then the table space status remains unchanged.

System programmer response

Notify IBM Software Support.

User response

Notify the system programmer.

Severity

4

DSNU1734I ***csect-name*** **- UNABLE TO READ** ***page-type*** **PAGE** ***page-number*****. ERROR CODE** ***hex-value1*** **REASON CODE** ***hex-value2*** **ROWID** ***rowid*** **VERSION** ***version***

Explanation

An attempt to read page number *page-number* failed with error code *hex-value1* and reason code of *hex-value2*. The page belongs to the LOB with the ROWID *rowid* and version *version*. *page-type* specifies the type of page that is expected: 'LOB MAP' for an expected LOB map, or 'LOB DATA/MAP' for a page that could be a LOB map or a data page.

System action

If SHRLEVEL REFERENCE was specified or defaulted, then the LOB table space status is set to CHECK Pending (CHKP). If SHRLEVEL CHANGE was specified, then the table space status remains unchanged.

System programmer response

Notify IBM Software Support.

User response

Notify the system programmer.

Severity

4

DSNU1735I ***csect-name*** **- UNABLE TO READ** ***page-type*** **PAGE** ***page-number*****. ERROR CODE** ***hex-value*** **REASON CODE** ***hex-value***

Explanation

An attempt to read page number *page-number* failed with error code *hex-value1* and reason code of *hex-value2*. *page-type* specifies the type of page that is expected: 'HIGH-LEVEL SPACE MAP' or 'LOW-LEVEL SPACE MAP'.

System action

If SHRLEVEL REFERENCE was specified or defaulted, then the LOB table space status is set to CHECK Pending (CHKP). If SHRLEVEL CHANGE was specified, then the table space status remains unchanged.

System programmer response

Notify IBM Software Support.

User response

Notify the system programmer.

Severity

4

DSNU1736I ***csect-name*** **- INVALID DATA LENGTH FOR PAGE** ***page-number*** **ROWID** ***row-ID*** **VERSION** ***version***

Explanation

CHECK LOB detected a data length in a LOB that is longer than the available space for data on the specified page.

csect-name
The name of the control section that issued the message.

page-number
The data page that contains the invalid length.

row-ID
The row identifier of the LOB.

version
The version of the LOB.

System action

If SHRLEVEL REFERENCE was specified or applied by default, the LOB table space status is set to CHECK Pending (CHKP). If SHRLEVEL CHANGE was specified, the table space status remains unchanged.

System programmer response

Notify IBM Support

User response

Notify the system programmer

Severity

0 (informational)

Related reference
CHECK LOB (Db2 Utilities)

DSNU1801I ***csect-name*** **SYSTEM PARAMETER** ***parameter-name*** **HAS BEEN MODIFIED TO** ***parameter-value*****. RESTART IS NOT ALLOWED.**

Explanation

The utility could not be restarted because a Db2 subsystem parameter was modified after the first invocation of this utility.

csect-name
The name of the control section that issued the message.

parameter-name
The name of the parameter.

parameter-value
The parameter value that was changed.

System action

The utility abends with ABEND04E RC00E40018 (error detected during a restarted utility).

System programmer response

If necessary, change the subsystem parameter value back to the value that was used when the utility was first run.

User response

If necessary, issue the TERM UTILITY command to terminate the utility. If you want to restart the utility, determine the current value of the indicated subsystem parameter and take the appropriate action:

- If the parameter value has already been corrected, restart the utility.
- If the parameter value is still incorrect, notify the system programmer, and restart the utility after the value has been changed.

Related reference
-TERM UTILITY (Db2) (Db2 Commands)
Related information
00E40018 (Db2 Codes)

DSNU1802I ***csect-name*** **A SEQUENTIAL COPY OF A COMPRESSED INDEX IS NOT ALLOWED FOR INDEXSPACE** ***database-name.object-name***

Explanation

A sequential copy of a compressed index is not allowed to be made from a FlashCopy® image copy. You cannot request that a sequential copy be created from a FlashCopy image copy of a compressed index with the COPYTOCOPY utility. Additionally, you cannot request both a sequential copy and FlashCopy image copy of a compressed index in the same COPY utility statement.

csect-name
The name of the control section that issued the message.

database-name
The name of the database.

object-name
The name of the object.

System action

Processing terminates.

Programmer response

Remove the compressed index from the list of objects to be copied.

Severity

8 (error)

DSNU2700I ***csect-name*** **UNLOAD PHASE STATISTICS: NUMBER OF RECORDS=*total-records* (TOTAL). NUMBER OF RECORDS=*overflow-records* (OVERFLOW)**

Explanation

The REBUILD INDEX utility is in the UNLOAD phase.

csect-name
The name of the control section that issued the message.

total-records
The total number of records, which indicates the number of rows in the entire table space.

overflow-records
The number of rows that are in the hash overflow area, and which require an index entry in the hash overflow index.

System action

Utilities continue to process.

User response

No action is required.

Severity

0 (informational)

Related reference
REBUILD INDEX (Db2 Utilities)

DSNU2801I ***csect-name*** **- RTS VALUES ARE NOT AVAILABLE FOR ESTIMATING HASH SPACE VALUE FOR *table-name***

Explanation

The REORG TABLESPACE utility was specified with the AUTOESTSPACE(YES) option, but real-time statistics were not available to estimate the size of the hash space. The user-specified hash space value was used to build the hash space for the table.

csect-name
The name of the control section that issued the message.

table-name
The name of the table.

System action

Utilities continue to process.

User response

Run the REORG TABLESPACE utility with the AUTOESTSPACE(YES) option when real-time statistics values are available.

Severity

4 (warning)

Related reference
REORG TABLESPACE (Db2 Utilities)

DSNU2802I ***csect-name*** **THE HASH SPACE HAS BEEN PREALLOCATED AT *x* FOR TABLE *table-name***

Explanation

The hash space has been created for the indicated table.

csect-name
The name of the control section that issued the message.

table-name
The name of the table.

The hash space value can either be specified by the user or be determined based on real-time statistics, through the REORG TABLESPACE AUTOESTSPACE(YES) option.

System action

Utilities continue to process.

User response

No action is required.

Severity

0 (informational)

Related reference
REORG TABLESPACE (Db2 Utilities)

DSNU2803I ***csect-name*** **PARTITION LEVEL REORG CANNOT BE PERFORMED AFTER ALTER ADD ORGANIZATION OR ALTER DROP ORGANIZATION**

Explanation

A partition-level reorganization cannot be performed on a table space after either an ALTER ADD ORGANIZATION or ALTER DROP ORGANIZATION action.

csect-name
The name of the control section that issued the message.

System action

Utility execution is terminated.

User response

Correct hte REORG utility statement to remove the PART specification.

Severity

8 (error)

Related reference
REORG TABLESPACE (Db2 Utilities)

DSNU2900I ***csect-name*** **MAPPING TABLE IS SPECIFIED WITH A NON-EXPANDED LRSN COLUMN**

Explanation

A REORG utility statement has detected that the user provided a mapping table with a CHAR(6) LRSN column definition.

csect-name
The name of the control section that issued the message.

System action

Before reaching Db2 11 new-function mode, REORG processing continues with the user input mapping table. After reaching Db2 11 new-function mode, REORG ignores the user-specified mapping table and implicitly creates a mapping table with a CHAR(10) LRSN column definition.

Operator response

No action is required.

Severity

4 (warning)

DSNU2901I ***csect-name*** **MAPPING TABLE** ***table-name*** **and MAPPING INDEX** ***index-name*** **CREATED IN DATABASE** ***database-name.tablespace-name***

Explanation

The REORG utility statement implicitly created the reported mapping table and mapping index in the specified database name and table space name.

csect-name
The name of the control section that issued the message.

table-name
The name of the table.

index-name
The name of the index.

database-name
The name of the database.

tablespace-name
The name of the table space.

System action

Utility processing continues.

Operator response

No action is required.

Severity

0 (informational)

DSNU2902I ***csect-name*** **MAPPING DATABASE** ***database-name*** **IS INVALID**

Explanation

The REORG utility statement has detected that the database that is specified for the REORG TABLESPACE utility MAPPINGDATABASE keyword or the REORG_MAPPING_DATABASE subsystem parameter does not exist or cannot be used to implicitly create a mapping table.

csect-name
The name of the control section that issued the message.

database-name
The name of the database.

System action

Utility processing terminates.

Administrator response:
Specify a valid database name for the REORG TABLESPACE utility MAPPINGDATABASE keyword or

specify a valid value for the REORG_MAPPING_DATABASE subsystem parameter.

Severity

8 (error)

DSNU2903I ***csect-name*** **- PARTITION LEVEL INLINE COPY DATASETS WILL BE ALLOCATED.**

Explanation

REORG is reorganizing a partitioned table space and detects a valid TEMPLATE is specified for the creation of part-level inline copy data sets.

System action

Processing continues.

Severity

0 (informational)

DSNU2904I ***csect-name*** **- DATA RECORDS WILL BE UNLOADED VIA** ***unload-method*****.**

Explanation

The REORG utility determines the data records that are unloaded via one of the following *unload-methods*:

CLUSTERING INDEX
Data records are unloaded by the clustering index order.

TABLE SCAN
Data records are unloaded by performing a table scan.

TABLE SPACE SCAN
Data records are unloaded by performing a table space scan.

System action

Processing continues.

Severity

0 (informational)

DSNU2905I ***csect-name*** **- EMPTY DATA PARTITION** ***lowest-partition*** **TO** ***highest-partition*** **DELETED.**

Explanation

The REORG utility deleted the empty partitions in the given range. Auxiliary tables and auxiliary indexes that are associated with these deleted base partitions are dropped. Db2 also drops any implicitly created LOB table spaces for these auxiliary tables.

csect-name
The name of the control section that issued the message.

lowest-partition
The lowest partition number of the range of deleted partitions.

highest-partition
The highest partition number of the range of deleted partitions.

System action

Processing continues.

Severity

0 (informational)

DSNU2906I ***csect-name*** **- REBALANCE PARTITION SUMMARY ON** ***database-name.tablespace-name***

Explanation

The header message for the partition summary section of the REORG TABLESPACE REBALANCE output on database *database-name* table space *tablespace-name*. This section lists the affected data partitions as a result of data rebalancing:

LPART
The logical partition number.

PPART
The physical partition number.

ROWCOUNT
The number of records in this partition.

LIMITKEY
The limit key value for this partition.

csect-name
The name of the control section that issued the message.

database-name
The name of the database.

tablespace-name
The name of the table space.

System action

Utility processing continues.

Severity

0 (informational)

Related reference

REORG TABLESPACE (Db2 Utilities)

DSNU2907I ***csect-name*** **- MAPPING** ***object-type operation-type*** **FAILED**

Explanation

The REORG utility encountered an SQL error during implicit creation or deletion of the specified mapping object.

csect-name
The name of the control section that issued the message.

object-type
The type of object: table space, table, or index.

operation-type
The type of operation: creation or deletion.

System action

If *operation-type* is creation, utility processing terminates.

If *operation-type* is deletion, utility processing completes with a warning.

User response

Determine the cause of the SQL error by using the information from the accompanying DSNU11xx message.

Severity

If *operation-type* is creation:

8 (error)

If *operation-type* is deletion:

4 (warning)

DSNU2916I ***csect-name*** **- PENDING ALTER LIMIT KEY VALUES ARE BEING MATERIALIZED**

Explanation

The REORG TABLESPACE utility is reorganizing a partitioned table space and, as part of that reorganization, is materializing the pending alter limit key values on the affected data partitions.

csect-name
The name of the control section that issued the message.

System action

Utility processing continues.

User response

No action is required.

Severity

0 (informational)

Related tasks

Redistributing data in partitioned table spaces (Db2 Administration Guide)

Materializing pending definition changes (Db2 Administration Guide)

Related reference

REORG TABLESPACE (Db2 Utilities)

DSNU2917I ***csect-name*** **-** ***keyword*** **IS NOT ALLOWED ON TABLE SPACE WITH PENDING ALTER LIMIT KEY CHANGES**

Explanation

The REORG TABLESPACE utility is attempting to run on a table space or partitions with pending alter limit key changes. However, the specified keyword is not allowed because of the pending alter limit key changes.

csect-name
The name of the control section that issued the message.

keyword
The keyword in the REORG TABLESPACE control statement that is not allowed in this situation.

System action

Utility processing terminates

User response

Take one of the following actions:

- Remove *keyword* from the REORG TABLESPACE statement and rerun the utility.
- Drop the pending alters for the table space and then rerun REORG TABLESPACE.

Severity

8 (error)

Related reference

Syntax and options of the REORG TABLESPACE control statement (Db2 Utilities)

ALTER TABLESPACE (Db2 SQL)

DSNU2921I ***csect-name*** **- OPTION SHRLEVEL REFERENCE IS REQUIRED ON**

TABLESPACE *tablespace-name* TO COMPLETE THE POINT-IN-TIME RECOVERY PROCESS

Explanation

REORG with SHRLEVEL NONE was specified when REORG was run on the specified table space to complete a point-in-time recovery process. Only SHRLEVEL REFERENCE is valid in this case.

tablespace-name
The name of the table space.

System action

Utility processing is not initiated.

User response

Run REORG with SHRLEVEL REFERENCE to finalize the point-in-time recovery process.

Severity

8 (error)

Related reference
REORG TABLESPACE (Db2 Utilities)

DSNU2924I ***csect-name* - CDDS IS NOT UPDATED BY INITCDDS OPERATION DUE TO *reason***

Explanation

REORG TABLESPACE with the INITCDDS option could not update the compression dictionary data set (CDDS) for the reason that is indicated by *reason*.

csect-name
The name of the control section that issued the message.

reason
One of the following values:

NON-SOURCE DB2 SUBSYSTEM
REORG TABLESPACE was run on a Db2 subsystem in which subsystem parameter CDDS_MODE was not set to SOURCE.

TABLE SPACE WITH NO CDC TABLES
The target table space is not defined with the DATA CAPTURE CHANGES attribute.

COMPRESS NO TABLE SPACE OR PARTITION
The target page set is not a compressed table space or partition.

System action

Utility processing continues.

Severity

0 (informational)

DSNU2925I ***csect-name* - EXPANSION DICTIONARY FOR TABLE SPACE *database-name.table-space-or-table-space-and-partition* IS INSERTED INTO THE CDDS WITH: DICTIONARY VERSION = *lrsn* CDDS KEY VALUE = *cdds-key-value***

Explanation

An expansion dictionary for the specified page set was successfully inserted into the compression dictionary data set (CDDS). The expansion dictionary that was inserted is indicated by the RBA or LRSN value, and the key value.

csect-name
The name of the control section that issued the message.

table-space-or-partition
One of the following values:

table-space
If the expansion dictionary is for an entire table space, the name of that table space.

table-space* PART *partition-number
If the expansion dictionary is for a partition of a table space, the name of the table space and the partition number.

lrsn
The LRSN value that is used to specify the version of the expansion dictionary.

cdds-key-value
The key-sequenced data set key value for the expansion dictionary in the CDDS.

System action

Utility processing continues.

Severity

0 (informational)

DSNU2926I ***csect-name* - CDDS ACCESS ERROR, REASON CODE *reason-code***

Explanation

The utility failed to read from or write to the compression dictionary data set (CDDS).

csect-name
The name of the control section that issued the message.

reason-code
A Db2 reason code that indicates why the failure occurred.

System action

If the CDDS is stopped, the LOAD or REORG utility cannot build a new expansion dictionary until the CDDS is restarted. If the utility is not REORG TABLESPACE with the INITCDDS option, utility processing continues. Otherwise, utility processing terminates.

User response

Use the information that is provided by the reason code to correct the problem that caused the CDDS failure. Then resubmit the utility job.

Severity

8 (informational)

DSNU2927I ***csect-name*** **- DICTIONARY EXISTS FOR TABLE SPACE** ***table-space-or-partition*** **WITH: DICTIONARY VERSION =** ***lrsn*** **CDDS KEY VALUE =** ***cdds-key-value***

Explanation

An expansion dictionary for the specified page set already exists in the compression dictionary data set (CDDS).

csect-name
The name of the control section that issued the message.

table-space-or-partition
One of the following values:

table-space
If the expansion dictionary is for an entire table space, the name of that table space.

table-space **PART** ***partition-number***
If the expansion dictionary is for a partition of a table space, the name of the table space and the partition number.

lrsn
The LRSN value that is used to specify the version of the expansion dictionary.

cdds-key-value
The key-sequenced data set key value for the expansion dictionary in the CDDS.

System action

An expansion dictionary is not inserted into the CDDS. Utility processing continues.

Severity

0 (informational)

DSNU2930I ***csect-name*** **- OUT OF PARTITION SEQUENCE KEYS DETECTED FOR INDEX** ***creator-name.index-name***

Explanation

The utility is processing index keys that are not in partition order. This condition can be caused by an internal program logic error or preexisting data corruption on the objects before utility execution. Out-of-order keys can result in suboptimal utility performance and possibly data corruption that cannot be resolved by utility execution.

csect-name
The name of the control section that issued the message.

creator-name.index-name
The name of the index, qualified by the name of its creator, for which the out-of-order keys were detected.

System action

Utility processing continues

User response

Run the CHECK INDEX utility to validate the integrity of the rebuilt index. If you suspect an internal Db2 sort issue, contact IBM Support with utility job output.

Severity

4 (warning)

Related reference
CHECK INDEX (Db2 Utilities)

DSNU3030I **JOB** ***jobname*** **CANCEL ACCEPTED, WAITING FOR DB2 THREADS TO TERMINATE**

Explanation

A CANCEL command was issued for a job while a Db2 utility was active. The job will terminate after all of its Db2 threads have terminated.

System action

All threads created by the utility will perform the rollback and deallocation processing that is required. When this is complete the job will terminate.

System programmer response

Rollback processing might take a significant amount of time, especially for a LOAD LOG YES utility. Under extreme conditions a FORCE command can be used to immediately terminate the job, but this is not recommended because it can cause the thread deallocation to abend.

Severity

0

DSNU3330I ***csect-name*** **- The** ***utility-name*** **UTILITY IS PART OF A SEPARATELY LICENSED FEATURE WHICH WAS NOT FOUND ON THIS SYSTEM.**

Explanation

Db2 could not find the specified utility in the load library concatenation that was specified in the submitted JCL. The specified utility is part of an optional feature of Db2.

csect-name
The name of the control section that issued the message.

utility-name
The name of the utility.

System action

Utility processing does not initiate.

System programmer response

Obtain and install the optional utility feature (FMID JDBBB1K).

Severity

8 (error)

Related concepts
Db2 utilities packaging (Db2 Utilities)

DSNU3333I ***csect-name*** **- LOAD MODULE** ***module-name*** **DID NOT LOAD CORRECTLY. THE** ***utility-name*** **UTILITY FUNCTION IS RESTRICTED**

Explanation

The identified load module was found in the product library, but could not be loaded into memory correctly.

System action

Utility processing continues but the identified utility has restricted function. It may only be executed against objects in the Db2 catalog, the Db2 directory or the Db2 sample program.

System programmer response

Make sure the identified load module is reenterable and reusable and that it is being loaded from an APF authorized library. This error is normally caused by incorrectly copying a load module or its alias. Use only SMP/E APPLY or the IEWL program to create load modules and their aliases. If SMP/E has produced a load module that is not reenterable and reusable notify IBM Support.

Severity

4 (warning)

DSNU3334I **REGION SIZE IS TOO SMALL. UTILITY CANNOT CONTINUE. INCREASE REGION BY** ***additional-memory*****K.**

Explanation

The REGION size that is specified on the utility job or job step allocates too little virtual memory for the utility to run.

additional-memory
The minimum additional amount of memory that the utility estimates it requires to run.

System action

The utility terminates.

System programmer response

If the region size is limited by the IEFUSI exit routine, consider modifying the exit routine to allow a larger region.

User response

Increase the region size by at least the amount indicated by additional-memory in the message, and resubmit the job. For example, if the region was set to 2048 KB (REGION=2048K), and the message indicates "INCREASE REGION BY 240K", change the region size to at least REGION=2288K. If possible, allow an additional buffer amount: REGION=3M or REGION=4M.

Severity

8 (error)

DSNU3340I **UTILITY PERFORMS DYNAMIC ALLOCATION OF SORT DISK SPACE**

Explanation

The utilities that invoke a sort will perform predictable sort disk space dynamic allocation.

System action

Processing of the phase continues.

Programmer response

No action is required.

Severity

0 (informational)

DSNU3341I **CANNOT ALLOCATE SORT DATA SETS WITHIN 255 LIMIT**

Explanation

When the utility performs dynamic allocation of sort data sets, the total number of data sets per phase must be less than 255 data sets.

System action

Utility processing is terminated.

System programmer response

Provide more disk space for sort work data sets.

Programmer response

No action is required.

Severity

8 (error)

DSNU3342I **NUMBER OF OPTIMAL SORT TASKS = *nnn*, NUMBER OF ACTIVE SORT TASKS = *nnn***

Explanation

The first number indicates the optimal number of sort tasks for the utility execution. The second number show the maximum number of sort tasks possible for the utility execution.

System action

Processing of the phase continues.

Programmer response

No action is required.

Severity

0 (informational)

DSNU3343I ***csect-name* - REAL-TIME STATISTICS INFORMATION MISSING FOR *object-type object-qualifier.object-name partition-information***

Explanation

The utility could not read necessary information from real-time statistics tables for the specified index or table space.

csect-name
The name of the control section that issued the message.

object-type
The type of object.

object-qualifier.object-name
The name of the object, as a qualified name.

partition-information
If the object is partitioned, the partition number for which information is missing.

This message can be issued during REBUILD INDEX on catalog and directory indexes when Db2 has been started with the ACCESS (MAINT) option, in which case the real-time statistics information is not queried, or when the real-time statistics objects are not available.

System action

The utility continues, but will use estimates based on RUNSTATS information for this object.

System programmer response

Make sure that real-time statistics are enabled on the system. Run the REORG INDEX or REBUILD INDEX utility on the specified object to set the base values in the real-time statistics tables.

Severity

0 (informational)

Related tasks

Setting up your system for real-time statistics (Db2 Performance)

Related reference

REORG INDEX (Db2 Utilities)

REBUILD INDEX (Db2 Utilities)

DSNU3344I **REAL-TIME STATISTICS INFORMATION MISSING FOR *object-type object-qualifier.object-name part-number*. PROCESSING CANNOT PROCEED.**

Explanation

RUNSTATS could not read the necessary information from the real-time statistics tables for the object.

object-type
The type of object.

object-qualifier.object-name
The name of the object, as a qualified name.

part-number
The value that identifies the partition or data set.

System action

RUNSTATS terminates.

System programmer response

Run the REORG INDEX or REBUILD INDEX utility on the specified object to set the base values in the real-time statistics tables. Then run RUNSTATS with TABLESAMPLE SYSTEM *n* again.

Severity

8 (error)

Related reference
REORG INDEX (Db2 Utilities)
REBUILD INDEX (Db2 Utilities)

DSNU3345I ***csect-name* MAXIMUM *parallelism-type* PARALLELISM IS *number-of-tasks* BASED ON *condition***

Explanation

This message indicates the maximum amount of parallelism that can be achieved when the utility runs, if no constraints are applied.

Parallelism for a utility is typically implemented by processing partitions or indexes in parallel. The maximum degree of parallelism when a utility runs is usually determined by either the number of partitions or the number of indexes that are being processed. This message can serve as a baseline to see if the optimal degree of parallelism is being achieved. If constraints limit parallelism, parallelism can be increased to this value if the constraints are removed.

csect-name
The name of the control section that issued the message.

parallelism-type
The type of parallelism to which the limit applies. Possible values are:

INDEX
Index parallelism

PARTITION
Partition parallelism

number-of-tasks
The maximum number of parallel tasks that can be started for this utility.

condition
The condition that controls the maximum amount of parallelism. Possible values are:

NUMBER OF INDEXES
The number of indexes that the utility is processing.

NUMBER OF INDEXES AND STATISTICS
The number of indexes and statistics that the utility is processing.

NUMBER OF INPUT FILES
The number of input files that the utility is processing.

NUMBER OF OBJECTS
The number of objects that the utility is processing.

NUMBER OF PARTITIONS
The number of partitions that the utility is processing.

NUMBER OF PARTITIONS AND INDEXES
The number of partitions and indexes that the utility is processing.

MEMORY AND INDEXES
Available memory and the number of indexes.

System action:
Processing continues.

User response

No action is required.

DSNU3346I **REAL-TIME STATISTICS INFORMATION MISSING FOR *object-type object-qualifier.object-name*. SAMPLING RATE CHANGED TO 100.**

Explanation

RUNSTATS could not read the necessary information from the real-time statistics tables for the object.

object-type
The type of object.

object-qualifier.object-name
The name of the object, as a qualified name.

System action

RUNSTATS sets the sampling rate to 100, and continues to run.

System programmer response

If a sampling rate of 100 is appropriate, no action is required. Otherwise, run the REORG TABLESPACE utility on the specified object to set the base values in the real-time statistics tables. Then run RUNSTATS with TABLESAMPLE SYSTEM *n* again.

Severity

4 (warning)

Related reference

REORG TABLESPACE (Db2 Utilities)

DSNU3350I ***csect-name*** **- SORT task-prefix:** ***number-sorted*** **RECORDS SORTED, ESTIMATED** ***number-estimated*****, VARIATION** ***variation-percent*** **PERCENT**

Explanation

This message reports information about the actual and estimated numbers of records processed for each utility sort task.

task-prefix
The prefix of the sort work data set used by the utility sort task.

number-sorted
The number of records processed.

number-estimated
The estimated number of records processed.

variation-percent
The percentage of variation between the actual and estimated number of sort records processed.

This value is -1 if *number-estimated* is 0.

A large variation between actual values and estimated values might indicate problems with real-time statistics or be caused by outdated statistics. If the estimates are too low, utilities might fail. If the estimates are too high, memory and disk storage resources might be allocated unnecessarily, negatively affecting other applications that run at the same time.

The estimates are based on real-time statistics and database object statistics that are collected in the Db2 catalog. If real-time statistics values are missing, Db2 attempts to use real-time statistics for related objects, such as indexes, before it uses statistics in the Db2 catalog.

System action

Processing continues.

User response

If real-time statistics values are incorrect or missing, check for processes that might invalidate or corrupt the collection of real-time statistics, such as point-in-time recovery or updates of objects not controlled by Db2. If the collected statistics in the Db2 catalog are out-of-date, collect statistics again soon.

Severity

0 (informational)

Related concepts

How real-time statistics are used by Db2 utilities (Db2 Utilities)

How real-time statistics affect sort work data set allocation for Db2 utilities (Db2 Performance)

Related tasks

Maintaining Db2 database statistics (Db2 Performance)

Setting up your system for real-time statistics (Db2 Performance)

DSNU3351I ***csect-name*** **- SORT task-prefix:** ***number-sorted*** **: AVERAGE RECORD LENGTH PROCESSED** ***average-length*****, ESTIMATED** ***estimated-length*****,VARIATION** ***variation-percent*** **PERCENT**

Explanation

This message reports information about estimated and actual record lengths for each utility sort task.

task-prefix
The prefix of the sort work data set used by the utility sort task.

average-length
The average length of records that are processed for the sort operation.

estimated-length
The estimated average length of records that are processed for the sort operation.

variation-percent
The variation between the actual and estimated average record length.

A large variation between actual values and estimated values might indicate problems with real-time statistics or be caused by outdated statistics. If the estimates are too low, utilities might fail. If the estimates are too high, memory and disk storage resources might be allocated unnecessarily, negatively affecting other applications that run at the same time.

The estimates are based on real-time statistics and database object statistics that are collected in the Db2 catalog. If real-time statistics values are missing, Db2 attempts to use real-time statistics for related objects, such as indexes, before it uses statistics in the Db2 catalog.

System action

Processing continues.

User response

If real-time statistics values are incorrect or missing, check for processes that might invalidate or corrupt the collection of real-time statistics, such as point-in-time recovery or updates of objects that are not controlled by Db2. If the collected statistics in the Db2 catalog are out-of-date, collect statistics again soon.

Severity

0 (informational)

Related concepts

How real-time statistics are used by Db2 utilities (Db2 Utilities)

How real-time statistics affect sort work data set allocation for Db2 utilities (Db2 Performance)

Related tasks

Maintaining Db2 database statistics (Db2 Performance)

Setting up your system for real-time statistics (Db2 Performance)

DSNU3352I ***csect-name*** **- SORT** ***task-prefix*****: USED** ***sort-program***

Explanation

This message identifies the external sort program that processes each utility sort task.

task-prefix
The prefix of the sort work data set used by the utility sort task.

sort-program
The name of the sort program that processed the sort operation:

DFSORT
The utility used DFSORT for z/OS.

DB2 SORT OPTMODE=CPU
The utility used Db2 Sort for z/OS with OPTMODE=CPU.

DB2 SORT OPTMODE=ELAP
The utility used Db2 Sort for z/OS Sort for z/OS with OPTMODE=ELAP.

DB2 SORT OPTMODE=BALANCE
The utility used Db2 Sort for z/OS with OPTMODE=BALANCE.

System action

Processing continues.

User response

No action is required.

Severity

0 (informational)

DSNU3353I ***csect-name*** **- SORT** ***task-prefix*****: DB2 SORT SKIPPED** ***percent-skipped*** **PERCENT OF ZIIP OFFLOAD REQUESTS**

Explanation

This message reports information about the percentage of sort work requests for each utility sort task to Db2 Sort for z/OS that are eligible for offload to IBM Z Integrated Information Processor (zIIP) specialty engines but are processed by general CPs:

task-prefix
The prefix of the sort work data set used by the utility sort task.

percent-skipped
The percentage of sort requests that are eligible to be processed on zIIP specialty engines but are processed by general CPs instead. This value is -1 if no zIIP specialty engine is installed.

Db2 Sort for z/OS offloads parts of sort processing to zIIP specialty engines to reduce general CP consumption. However, if scheduling work for zIIP specialty engines would cause increased wait time because too many processes compete for a limited number of zIIP specialty engines, the work might be run on general CPs to avoid excessive elapsed time impact.

System action

Processing continues.

User response

If the percentage of failed offload requests is constantly high, monitor the use of zIIP specialty engines to determine which processes are using zIIP specialty engines and whether more zIIP specialty engines might benefit the CPU consumption of utility jobs.

Severity

0 (informational)

Related tasks

Monitoring processor use by utilities (Db2 Utilities)
Monitoring zIIP and zAAP specialty engine use for Db2 (Db2 Performance)
Configuring IBM Z Integrated Information Processor (zIIP) specialty engines for Db2 (Db2 Performance)

DSNU3354I ***csect-name*** **- SORT** ***task-prefix*****: MEMORY** ***memory-location*** **THE BAR: OPTIMAL** ***optimal-memory*** **MB, USED** ***actual-memory*** **MB**

Explanation

This message reports information about the use of storage for each utility sort task:

task-prefix
The prefix of the sort work data set used by the utility sort work.

memory-location
Whether the reported values apply to memory above or below the 2 GB bar.

optimal-memory
The optimal amount of memory that is needed for the estimated amount of data to be sorted without constraints. This value is determined based on the estimated amount of data before the sort starts.

actual-memory
The actual amount of memory that is used by the utility sort work. This value is -1 if the actual memory consumption value is not available.

Memory above the 2 GB bar reduces disk I/O for storing data in sort work data sets. Insufficient memory resources above the bar might affect elapsed time, without causing other problems. However, memory below the bar is essential for sort work processing. Sort work must be allowed to use at least the optimal amount of memory if possible.

Small variations of *actual-memory* versus *optimal-memory* can occur when data distributions cause unfavorable sort paths that require more memory than estimated. Also, *actual-memory* can be much larger than *optimal-memory* if unused memory detected during the sort operation offers even better performance.

System action

Processing continues.

User response

If *actual-memory* is regularly smaller than *optimal-memory*, consider adjusting the system settings for memory, such as the region size of the utility job and by the IEFUSI exit routine limits, to improve overall utility performance.

Severity

0 (informational)

Related tasks

Improving the performance of sort processing (Db2 Performance)

DSNU3355I ***csect-name*** **- TOTAL SORT MEMORY** ***memory-location*** **THE BAR: OPTIMAL** ***optimal-memory*** **MB, USED** ***actual-memory*** **MB**

Explanation

This message reports information about the total use of storage for utility sort processing.

memory-location
Whether the reported values apply to memory above or below the 2 GB bar.

memory-location
Whether the reported values apply to memory above or below the 2 GB bar.

optimal-memory
The optimal amount of memory that is needed for the estimated amount of data to be sorted.

actual-memory
The actual amount of memory that is used by the utility sort work. This value is -1 if the actual memory consumption value is not available.

Memory above the 2 GB bar is used to reduce disk I/O for storing data in sort work data sets. Insufficient memory resources above the bar might affect elapsed time, without causing other problems. However, memory below the bar is essential for sort work processing, and sort work must be allowed to use the optimal amount of memory if possible.

Memory below the bar can be limited by options such as the region size of the utility job and by the IEFUSI exit routine.

System action

Processing continues.

User response

Check for option settings that limit memory below the bar, such as the region size of the utility job and by the IEFUSI exit routine limits.

Severity

0 (informational)

DSNU3356I ***csect-name*** **- DB2 SORT SKIPPED** ***percent-skipped*** **PERCENT OF ZIIP OFFLOAD REQUESTS ON AVERAGE**

Explanation

This message reports summary information about the failed use of offload to IBM Z Integrated Information Processor (zIIP) specialty engines for all utility sort work that is processed by Db2 Sort for z/OS:

percent-skipped
The percentage of work for Db2 Sort for z/OS that is eligible to be processed on zIIP specialty engines but is processed by general CPs. This value is -1 if no zIIP specialty engine is installed.

System action

Processing continues.

User response

If the percentage of failed offload requests is constantly high, monitor the use of zIIP specialty engines to determine which processes are using zIIP specialty engines and whether more zIIP specialty engines might benefit the CPU consumption of utility jobs.

Severity

0 (informational)

Related tasks

Monitoring processor use by utilities (Db2 Utilities)

Monitoring zIIP and zAAP specialty engine use for Db2 (Db2 Performance)

Configuring IBM Z Integrated Information Processor (zIIP) specialty engines for Db2 (Db2 Performance)

DSNU3357I ***csect-name*** **- MAXIMUM SORT AMOUNT ESTIMATION VARIATION WAS** ***maximum-variation*** **PERCENT**

Explanation

This message reports information about the maximum variation between estimated and actual sort amounts, based on the number and length of sort records, for all utility sort work.

maximum-variation
The maximum variation percentage between estimated and actual sort amounts for all utility sort work.

A large variation between actual values and estimated values might indicate a problem with real-time statistics or be caused by outdated statistics. If the estimates are too low, utilities might fail. If the estimates are too high, memory and disk storage resources might be allocated unnecessarily, negatively affecting other applications that run at the same time.

The estimates are based on real-time statistics and database object statistics that are collected in the Db2 catalog. If real-time statistics values are missing, Db2 attempts to use real-time statistics for related objects, such as indexes, before it uses statistics in the Db2 catalog.

System action

Processing continues.

User response

If real-time statistics values are incorrect or missing, check for processes that might invalidate or corrupt the collection of real-time statistics, such as point-in-time recovery or updates of objects that are not controlled by Db2. If the collected statistics in the Db2 catalog are out-of-date, collect statistics again soon.

Severity

0 (informational)

Related concepts

How real-time statistics are used by Db2 utilities (Db2 Utilities)

Related tasks

Maintaining Db2 database statistics (Db2 Performance)

Setting up your system for real-time statistics (Db2 Performance)

Chapter 17. DSNV messages

Message identifiers that begin with DSNV communicate information about the agent services manager.

DSNV029E LOAD MODULE *module-name* DOES NOT HAVE AMODE(31) ATTRIBUTE

Explanation

During Db2 startup, Agent Services establishes the tasking structure for the control and resource manager address spaces. Three load modules, DSNVEUS3, DSNVEUS4, and DSNVRCT, are loaded and attached as the control programs for each subtask created. All three load modules must have been link-edited with the attributes AMODE(31) and RMODE(ANY). At least one of the modules did not have the 31-bit addressing attribute when it was loaded. The 'module-name' in the error message is the alias name of the first load module whose addressing mode was invalid.

System action

Db2 startup is terminated.

Operator response

Notify the system programmer of the failure.

System programmer response

Verify that all installation and maintenance activities against these modules were executed using SMP, that the JCLIN for SMP includes the correct AMODE and RMODE control statements, and that the Linkage Editor provided with the Data Facility Product (DFP) for the version of MVS being used was invoked by SMP for the link-edits. Correct the procedure or JCL which caused the error and rerun the necessary SMP jobs.

Problem determination

A Db2 dump was requested to a SYS1.DUMP data set.

Load module names and aliases are as follows:

Load module
Alias

DSNVEUS3
DSNVEU3I

DSNVEUS4
DSNVEU4I

DSNVRCT
DSNVRCTI

The MVS service aid AMBLIST provides Linkage Editor module attributes in the summary section of the LISTLOAD function output.

DSNV086E DB2 ABNORMAL TERMINATION REASON=*reason-code*

Explanation

The Db2 subsystem is being abended, because an error that cannot be corrected has occurred. This message, which is not automatically deleted from the operator console, is issued during Db2 abnormal termination. The *reason-code* value is the subsystem termination reason code. If Db2 abnormal termination is invoked multiple times, the subsystem termination reason code that accompanies this message is the reason associated with the first invocation.

System action

Abnormal termination processing continues.

Operator response

Notify the system programmer, and restart Db2.

System programmer response

This message is accompanied by one or more dumps. Obtain a copy of SYS1.LOGREC after Db2 completely terminates; also obtain a copy of the SVC dump(s). If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

Related concepts

Db2 reason codes (Db2 Codes)

DSNV401I DISPLAY THREAD REPORT FOLLOWS -

Explanation

This message marks the beginning of multiple lines of information in response to a DISPLAY THREAD command. Some lines in the output have their own

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message numbers or alphanumeric identifiers to assist with identification.

The output from the command consists of one or more (but not all) of the following sections:

- If SCOPE (GROUP) was specified, any thread-specific information is preceded by relevant information about the member: Member-specific information (DSNV473I, DSNV747I, DSNV475I, DSNV476I, DSNV503I)
- The member-specific information, or the DSNV401I message line if SCOPE(GROUP) was not specified, is followed by an information block that reports on threads by type:
  - Information about active, inactive, stored procedure, and system threads (DSNV402I, DSNV424I, and DSNV497I)
  - Information about indoubt and postponed threads (DSNV406I and DSNV431I)

  If TYPE(*) was specified, the output contains multiple information blocks.
- Depending on other command options or system conditions, some additional detail lines are present within the report block:
  - V429: Information about stored procedures
  - V436: Information about SQL statements
  - V437: Information about the user and application
  - V440: Information about threads that are managed by an XA transaction manager
  - V441: User accounting information
  - V442: Information about correlation tokens
  - V444: Information about distributed threads (for active, inactive, stored procedure, and system threads)
  - V445: Information about database access threads
  - V447 and V448: Information about conversations
  - V449: Information about IMS and CICS connections and RRS
  - V450: Information about downstream participants that might be indoubt
  - V451: Information about incomplete resolution of indoubt threads
  - V452: Information about heuristic commit decisions
  - V453: Information about heuristic abort decisions
  - V457: Information about resync protocol errors with participants
  - V458: Connection information for indoubt threads
  - V459: Information about syncpoint protocol errors with coordinators
  - V460: Information about syncpoint protocol errors with participants
  - V461: Information about heuristic damage
  - V462: Information about cold starts by participants
  - V463: Information about cold starts by coordinators
  - V464: Information about resync protocol errors with coordinators
  - V465: Information about threads that remain in the prepared state
  - V466: Information about how long a thread was indoubt
  - V467: Information about distributed threads (for indoubt and postponed threads)
  - V471: Information about available agents
  - V480 and V481: Information about the unit of recovery
  - V482: WLM information
  - V485: Information about trusted contexts
  - V490: Information about suspended threads
  - V492: Information about storage
  - V501: Information about commands
  - V502: Information about Db2 exit routines
  - V504: Information about threads that are terminating
  - V505: Information about threads that are waiting
  - V507: Information about monitoring tasks
  - V520: Information about autonomous procedures
- Information that indicates NOT FOUND situations
- Other information reported in the DISPLAY THREAD output
- End of report markers
- Error messages

Member-specific information (DSNV473I, DSNV747I, DSNV475I, DSNV476I, DSNV503I)

If you specify the SCOPE(GROUP) option, the output includes member-specific information before the thread-specific information for that member.

Depending on the DISPLAY THREAD options and the threads that are found, the output includes one or more of the following lines. Each line is followed by thread-specific information for the specified type of thread on that member:

```
DSNV473I ACTIVE THREADS FOUND FOR MEMBER: text
```

```
  DSNV474I INDOUBT THREADS FOUND FOR MEMBER:
text
```

```
  DSNV475I INACTIVE THREADS FOUND FOR MEMBER:
text
```

```
  DSNV476I POSTPONED ABORT THREADS FOUND FOR
MEMBER: text
```

```
  DSNV503I SYSTEM THREADS FOUND FOR MEMBER: text
```

text
Member name for which thread information is being displayed.

Information about active, inactive, stored procedure, and system threads (DSNV402I, DSNV424I, and DSNV497I)

The DISPLAY THREAD command reports the same type of information about active, inactive, stored procedure, and system threads.

The TYPE(ACTIVE) and TYPE(PROC) options generate a DSNV402I message.

```
DSNV402I - ACTIVE THREADS -
NAME     ST A   REQ ID               AUTHID
PLAN      ASID TOKEN
text     t  t    num text            text
text      hex   num
DISPLAY ACTIVE REPORT COMPLETE
```

The TYPE(INACTIVE) option generates a DSNV424I message.

```
DSNV424I - INACTIVE THREADS -
NAME     ST A   REQ ID               AUTHID
PLAN      ASID TOKEN
text     t  t    num text            text
text      hex   num
DISPLAY INACTIVE REPORT COMPLETE
```

The TYPE(SYSTEM) option generates a DSNV497I message.

```
DSNV497I - SYSTEM THREADS -
DB2 db2-statestate-phase
NAME     ST A   REQ ID               AUTHID
PLAN      ASID TOKEN
text     t  t    num text            text
text      hex   num
DISPLAY SYSTEM THREAD REPORT COMPLETE
```

Each thread that meets the report criteria is listed on a separate line. Additional information might be provided for individual threads.

Db2 *db2-statestate-phase*

The state of Db2 as follows:

db2-state
The state of Db2. Possible values are STARTING, STOPPING, or ACTIVE.

state-phase
The phase of restart or shutdown, if available. If *db2-state* is ACTIVE, no phase information is provided.

NAME *text*
The connection name that was used to establish the thread.

If the connection status value is "D", the connection name is either the connection name for the allied address space or the Db2 subsystem name.

For distributed database access threads, this field contains the following information:

requester-value
For threads that access the server from a Db2 for z/OS requester, this value is the connection name of the thread at the requesting location.

SERVER
For threads that access the server from a non-Db2 for z/OS requester, no connection name is identified.

blank
For threads where the originating task is running on the same Db2 subsystem, this value is blank.

When the connection name value is blank, the expected connection status value is "PT".

ST *t*
A one- or two-letter code that indicates connection status. Possible values are:

AC
A thread is executing in an accelerator server. This status is displayed until accelerator processing concludes and returns control to Db2.

AT
A thread that processes an autonomous procedure.

D
The thread is in the process of termination as a result of the termination of the associated allied task. If this thread is also the last (or only) Db2 thread for the address space, the associated allied task is placed in a wait state.

For an active thread, this value can indicate possible problems with Db2. If the activity indicator value is *, use the information in message DSN3201I to identify and resolve any problems.

DA
The database access thread slot is currently not associated with a remote connection and is

available to be assigned to a type 2 inactive thread.

DI
The thread is disconnected from an execution unit. No TCB is associated with the Db2 thread.

This value is possible is only when the connection name is "RRSAF".

N
The thread is in either IDENTIFY or SIGNON status.

This value is accompanied by a token value of "0".

ND
The thread is in either IDENTIFY or SIGNON status, and the thread is currently not associated with any TCB.

PT
A parallel task thread was established (plan allocated).

QD
The thread is queued for termination as a result of the termination of the associated allied task. If this thread is also the last (or only) Db2 thread for the address space, the associated allied task is placed in a wait state.

For an active thread, this value can indicate possible problems with Db2. If the activity indicator value is *, use the information in message DSN3201I to identify and resolve any problems.

QT
The CREATE THREAD request was queued. The associated allied task is placed in a wait state.

R2
A distributed thread is accessing a remote site on behalf of a request from another location. The thread is currently an inactive connection (type 2 inactive thread) and is waiting for an agent to become available.

RA
A distributed thread is accessing a remote site on behalf of a request from another location.

RK
A distributed thread is accessing a remote site on behalf of a request from another location. The thread is performing an operation that invoked Kerberos services. This status is displayed until Kerberos services returns control to Db2.

RN
A distributed thread is accessing a remote site on behalf of a request from another location. The request accesses data at another Db2 location. Therefore, the thread was suspended until Db2 connects to the partner location (establishes Db2 system conversations with the partner).

When another Db2 site is being contacted for the first time using system-directed access, Db2 must establish Db2 system conversations with the partner location. A request is presented to a Db2 DDF service task that establishes a system conversation. The thread is suspended until the request is processed. If the thread remains in this status for an extended period of time, the Db2 service task that establishes the system conversations might be busy processing other requests. The Db2 DISPLAY LOCATION command (DISPLAY LOCATION(*) DETAIL) shows conversation activity for this Db2 system conversation (SYSCON-O) service task.

RQ
A distributed thread is accessing a remote site on behalf of a request from another location.

The thread is suspended for one of the following reasons:

- The maximum number of active database access threads was reached. The number of threads is described by the MAX REMOTE ACTIVE value of the DSN6SYSP macro in the Db2 startup parameter, usually DSNZPARM.
- The system profile monitoring threshold was reached. The threshold is described in the DSN_PROFILE_ATTRIBUTES table.

Database access agents (DBAAs) are queued until other DBAAs deallocate or go inactive, providing an available slot. The DBAA resumes when a slot becomes available, and the DBAA is next in the queue.

Consider increasing the MAX REMOTE ACTIVE value.

RX
The distributed thread is executing an XA transaction on behalf of a request from another location.

SP
A thread is running within a stored procedure. This status value is displayed until the stored procedure terminates and returns control to Db2.

SW
A thread is waiting for a stored procedure to be scheduled. This status value is displayed until the stored procedure begins to run.

T
An allied, nondistributed thread was established (plan allocated).

TD
An allied thread was established (plan allocated), and the thread is currently not associated with any TCB.

TN
An allied thread was distributed to access data at another Db2 location, but it was suspended because Db2 was not connected to the partner location.

When another Db2 site is being contacted for the first time using system-directed access, Db2 must establish Db2 system conversations with the partner location. A request is presented to a Db2 DDF service task that establishes a system conversation. The thread is suspended until the request is processed. If the thread remains in this status for an extended period of time, the Db2 service task that establishes the system conversations might be busy processing other requests. The Db2 DISPLAY LOCATION command (DISPLAY LOCATION(*) DETAIL) shows conversation activity for this Db2 system conversation (SYSCON-O) service task.

TR
An allied thread was distributed to access data at another location.

A *t*
An indicator that the thread is active within Db2. *t* can have one of the following values:

*****
The thread is active.

blank
The thread is inactive.

REQ *num*
A counter that shows the number of Db2 requests. This counter restarts at 1 when the count exceeds 32767 requests.

ID *text*
The recovery correlation ID that is associated with the thread.

For distributed database access threads, this field contains one of the following values:

028.DBAA *nn*
This value indicates that the database access agent (DBAA) is performing connection processing, which consists of establishing the DBAA thread and validating and verifying the user's ID.

RACF requests are serialized on one of the Db2 RACF service tasks. This serialization might increase the validation time when multiple DBAAs are being created concurrently.

This value is possible only while the thread is being created.

requester-value
For threads that use system-directed access or application-directed access from a Db2 requester, this value is the correlation ID of the thread at the requesting location.

This value is possible only after the thread has been created.

external-name
For threads that use application-directed access from a non-Db2 requester, this value is the first 12 characters in the DDM external name (EXTNAM) parameter of the DDM EXCSAT command that is received as part of the SQL CONNECT statement.

This value is possible only after the thread has been created.

AUTHID *text*
The authorization ID that is associated with a signed-on connection.

PLAN *text*
The plan name that is associated with the thread.

For distributed database access threads, this field contains one of the following values:

DISTSERV
For threads that use application-directed access from a non-Db2 requester, no plan name is identified.

requester-value
For threads that use system-directed access or application-directed access from a Db2 requester, this value is the plan name that is being executed at the requesting location.

For RRSAF connected threads that did not specify a plan name at connect time, the value ?RRSAF is displayed.

If a thread was not established, this field is blank.

If this value is a system plan, see the information about system plans in message DSNT376I.

ASID *hex*
The address space ID (ASID) of the home address space. This value is a hexadecimal number of up to four characters.

TOKEN *num*
The thread token that is assigned to the thread.

For threads with a connection status value of "N", this value is "0".

If multiple threads have the same token, those threads are processing secondary connections in support of an application that uses package-based continuous block fetch.

The information about types of threads ends with a REPORT COMPLETE line.

Information about indoubt and postponed threads (DSNV406I and DSNV431I)

The DISPLAY THREAD command reports the same type of information about indoubt and postponed threads.

Information about indoubt threads begins with a DSNV406I message.

```
DSNV406I - INDOUBT THREADS -
COORDINATOR                STATUS     RESET
URID          AUTHID
text                       text       txt
hex           text
DISPLAY INDOUBT REPORT COMPLETE
```

Information about postponed abort threads begins with a DSNV431I message.

```
DSNV431I - POSTPONED ABORT THREADS -
COORDINATOR                STATUS     RESET
URID          AUTHID
text                       text       txt
hex           text
DISPLAY POSTPONED ABORT REPORT COMPLETE
```

Each thread that meets the report criteria is listed on a separate line. Additional information might be provided for individual threads.

COORDINATOR *text*
The name of the two-phase commit coordinator. The value depends on the type of thread, as follows:

Allied threads
The coordinator name is one of the following values:

- The IMS connection name
- The CICS connection name
- RRS (for Resource Recovery Services attachment facility connected threads)
- The location name of the local Db2 subsystem.

Additional information is displayed for IMS and CICS connections and for RRS.

Database access threads
The coordinator name is one of the following values:

- *location*:*luname*, where *location* is the relational database name for the coordinator and *luname* is the SNA LU name for the coordinator.
- *location*:*port*, where *location* is the relational database name for the coordinator and *port* is the TCP/IP port number for two-phase commit resynchronization for the coordinator.
- <*luname*>:*luname*, where *luname* is the SNA LU name for the coordinator.
- *nnn.nnn.nnn.nnn*:*port* , where *nnn.nnn.nnn.nnn* is the IP address for the coordinator and *port* is the TCP/IP port number for two-phase commit resynchronization for the coordinator.

If the thread is distributed, additional information is displayed.

STATUS *text*
The status of the thread.

If the status of a thread for a logical unit of work at a participant is INDOUBT, COMMITTED-H, or ABORTED-H, and the coordinator is a Db2 location that has not cold started, the lack of any information about the thread in a DISPLAY THREAD(INDOUBT) report indicates that the decision at the coordinator was to abort the logical unit of work.

This field can have one of the following values:

ABORT-P
A postponed abort unit of recovery. Objects for which this unit of recovery has backout work pending are inaccessible (restart-pending status) until the abort is completed (for example, by means of the RECOVER POSTPONED command).

ABORT-PSTRT
A postponed abort unit of recovery that is currently undergoing RECOVER POSTPONED processing or automatic Db2 backout processing (requested by restarting with system parameter LBACKOUT = AUTO).

ABORTED
A coordinator status that indicates that Db2 has one or more downstream participants that are using the Presumed Nothing (PN) protocol and might be indoubt. The thread is included in the DISPLAY THREAD output until all downstream PN participants complete indoubt resolution. The detail line V450 lists the downstream participants that have pending resolution. Database locks that were held for the thread are released.

If a participant resolved the indoubt thread with a heuristic decision, and the decision was COMMIT, detail line V452 is displayed. This detail line contains the name of the participant and the heuristic decision that it made. Because the coordinator aborted and the participant committed, this situation indicates heuristic damage. Information about the thread is displayed until it is deleted with the RESET INDOUBT command. The database administrators at all involved locations need to know that heuristic damage occurred and at which location.

ABORTED-H
An indoubt thread that was heuristically resolved with the RECOVER INDOUBT command. Information about the thread is displayed is displayed until the coordinator is informed of the heuristic decision. Additional detail lines might be included in the report.

COMMITTED
A thread that is committed. This status is displayed when Db2 is the coordinator and has downstream participants that might be indoubt. Information about the thread is included in the DISPLAY THREAD output until all downstream participants complete indoubt resolution. Detail line V450 lists the downstream participants that have pending resolution. Database locks that were held for the thread are released.

If a participant resolved the indoubt thread with a heuristic decision, and the decision was ABORT (rollback), detail line V453 is displayed. This detail line contains the name of the participant and the heuristic decision that it made. Because the coordinator committed and the participant aborted, this situation indicates heuristic damage. Information about the thread is displayed until it is deleted with the RESET INDOUBT command. The database administrators at all involved locations need to know that heuristic damage occurred and at which location.

COMMITTED-H
An indoubt thread that was heuristically resolved with the RECOVER INDOUBT command. Information about the thread is displayed until the coordinator is informed of the heuristic decision, and all downstream participants, if any, complete indoubt resolution. Additional detail lines might be included in the report to identify downstream participants that have pending resolution.

INDOUBT
A thread that is indoubt. Information about the thread is displayed until all indoubt resolution responsibilities are complete. Additional detail lines might be included in the report.

RESET *txt*
If this column contains "YES", the thread must be removed from the indoubt display. If necessary, use the RESET INDOUBT command to purge a thread. If this column is empty, the thread does not need to be removed.

URID *hex*
An RBA of the Db2 recovery log. This point is the beginning of recovery logging for this thread.

AUTHID *text*
The primary authorization ID that is associated with the thread.

The information about types of threads ends with a `REPORT COMPLETE` line.

V429: Information about stored procedures

If a thread is running a stored procedure, the output includes the following information about the stored procedure.

```
NAME     ST A   REQ ID               AUTHID
PLAN      ASID TOKEN
text     t  t   num text             text
text      hex  num
  V429 CALLING PROCEDURE=text, LOAD
MODULE=text,
       PROC=text, ASID=hex, WLM_ENV=text
```

PROCEDURE *text*
The name of the stored procedure.

LOAD MODULE *text*
The MVS load module that is associated with the stored procedure. This value is empty until the load module name is determined.

PROC *text*
The name of the JCL PROC that is used to start the address space where the stored procedure is running. This field is empty until the stored procedure is assigned to a specific stored procedure address space.

ASID *hex*
The MVS address space ID (ASID) of the address space where the stored procedure is running. This field contains the value 0000 until the stored procedure is assigned to a specific stored procedure address space.

WLM_ENV *text*
The name of the WLM application environment where the stored procedure is running.

V436: Information about SQL statements

If you specify a detail report and a thread is processing an SQL statement, the output includes the following information about the SQL statement and the program that contains the statement.

```
NAME     ST A   REQ ID               AUTHID
PLAN      ASID TOKEN
text     t  t   num text             text
text      hex  num
  V436-PGM=text, SEC=num, STMNT=num, THREAD-
INFO=text
```

PGM *text*
The collection ID and associated package or DBRM member. This information is provided in the following format:

```
collection.package
```

If the SQL statement that is being executed is not associated with a package, *collection* is not applicable and is indicated by an asterisk (*).

SEC *num*
The SQL section number that is associated with the package or DBRM.

STMT *num*
The SQL statement number that is associated with the package or DBRM.

THREAD-INFO *text*
Information about the thread. The information is presented in a colon-delimited list that contains the following segments:

- The primary authorization ID that is associated with the thread.
- The name of the user's workstation.
- The ID of the user.
- The name of the application.
- The statement type for the previously executed statement: dynamic or static.
- The statement identifier for the previously executed statement, if available. The statement identifier can be used to identify the particular SQL statement. For static statements, the statement identifier correlates to the STMT_ID column in the SYSIBM.SYSPACKSTMT table. For dynamic statements, the statement identifier correlates to the STMT_ID column in the DSN_STATEMENT_CACHE_TABLE table. That statement might not have contributed to the current failure.
- The name of the role that is associated with the thread.
- The correlation token that can be used to correlate work at the remote system with work performed at the Db2 subsystem. The correlation token, if available, is enclosed in '<' and '>' characters, and contains three components, separated by periods:
  - A 3 to 39 character IP address.
  - A 1 to 8 character port address.
  - A 12 character unique identifier.

An asterisk (*) in any segment indicates that the information is not available.

V437: Information about the user and application

If the client system is able to provide specific information about the user that is associated with this thread, this information is included in the output. If the information is not provided by the client system, the relevant fields contain an asterisk (*).

```
NAME     ST A   REQ ID               AUTHID
PLAN      ASID TOKEN
text     t  t   num text             text
text
  V437-WORKSTATION=text
       USERID=text
       APPLICATION NAME=text
```

WORKSTATION *text*
The workstation name

USERID *text*
The user ID

APPLICATION NAME *text*
The name of the client application

V440: Information about threads that are managed by an XA transaction manager

If the thread is related to a global transaction that is coordinated by an XID, the output includes XID information. The DISPLAY THREAD command must include the TYPE(ACTIVE) and DETAIL options, or the TYPE (INDOUBT) option for this information to be included.

Line V440 indicates that the thread is managed by an XA transaction manager, such as WebSphere® Application Server, which identifies the transaction with an *xid* value. The XID is provided to allow correlation with the XA transaction manager. Db2 uses both the logical unit of work identifier, *luwid*, and the XA transaction identifier, *xid*, to coordinate and recover transactions. Db2 is a participant in an XA transaction that is executing on behalf of an XA transaction manager.

```
NAME     ST A   REQ ID               AUTHID
PLAN      ASID TOKEN
text     t  t   num text             text
text      hex  num
  V440-XID=hex
```

XID *hex*
The XID is provided in its hexadecimal representation and consists of the following elements:

- A 4-byte format ID.
- A 4-byte global transaction identifier length (the gtrid_length field).
- A 4-byte branch qualifier length (bqual_length).
- Variable-length data that is composed of at most two contiguous components: A global transaction identifier length (gtrid_length), and a branch qualifier length (bqual_length). The gtrid_length element specifies the number of bytes (1-64) that constitute the gtrid, starting at the first byte of the data element. The bqual-length element specifies the number of bytes (up to 64) that constitute bqual, starting at the first byte after gtrid.

V441: User accounting information

If the client system is able to provide user accounting information for the thread, this information is included in the output. The DISPLAY THREAD command must include the DETAIL option and either the TYPE(ACTIVE), TYPE(INACTIVE), or TYPE(INDOUBT) option for this information to be included.

```
NAME     ST A   REQ ID               AUTHID
PLAN      ASID TOKEN
text     t  t   num text             text
text      hex  num
  V441-ACCOUNTING=text
```

ACCOUNTING *text*
The client end-user accounting information. This information is provided if the appropriate information is provided by the client system, and if Db2 recognizes the format of the information.

V442: Information about correlation tokens

If the client system is able to provide a correlation token that can be used to correlate work at the remote system with work that is performed at the Db2 subsystem, this information is included in the output.

```
NAME     ST A   REQ ID               AUTHID
PLAN      ASID TOKEN
text     t  t   num text             text
text      hex  num
  V442-CRTKN=text
```

CRTKN *text*
The correlation token, which is made up of three components separated by periods:

```
ip-address.port-address.unique-id
```

ip-address
The IP address is 3 to 39 characters in length.

port-address
The port address is 1 to 8 characters in length.

unique-id
The ID is 12 characters in length.

V444: Information about distributed threads (for active, inactive, stored procedure, and system threads)

If any threads were distributed to other locations, the output includes the logical unit of work identifier for each distributed thread.

```
NAME     ST A   REQ ID               AUTHID
PLAN      ASID TOKEN
text     t  t   num text             text
text
          text
  V444-text=num ACCESSING DATA AT
   text-address..number
```

***text=num* ACCESSING DATA AT**
Information to identify the distributed thread as follows:

text
The global logical unit of work ID (LUWID).

num
The local token that identifies the thread. This token can be used in place of the LUWID in any Db2 command that accepts LUWID as input.

If the thread becomes indoubt, a new token is assigned for the indoubt thread.

text-address..number
The remote DBMS at which data is being accessed.

text
The partner location name.

address
The partner LU name for an SNA connection, or the dotted decimal IP address for a TCP/IP connection (nnn.nnn.nnn.nnn).

number
An SQL port number. This token is included only if the second token is an IP address.

V445: Information about database access threads

The output includes the following information about database access threads:

```
NAME     ST A   REQ ID               AUTHID
PLAN      ASID TOKEN
text     t  t   num text             text
text
          text
  V445-text=num ACCESSING DATA FOR
   text
```

text=num
Information to identify the distributed thread as follows:

text
The global logical unit of work ID (LUWID).

num
The local token that identifies the thread. This token can be used in place of the LUWID in any Db2 command that accepts LUWID as input.

If the thread becomes indoubt, a new token is assigned for the indoubt thread.

ACCESSING DATA FOR *text*
The network address of the remote location. This value can be blank.

- If the connection with the requester is through SNA, this field contains the relational database name of the requester or the VTAM LU name of the requester, a dash (-) delimiter, and the LU name of the requester.
- If the connection with the requester is through TCP/IP, this field contains the IP address of the requester.

V447 and V448: Information about conversations

The output contains conversation information for active and inactive threads. Conversation information is displayed for a distributed access thread, distributed inactive connection, or distributed allied thread when a detail report is specified. Information is displayed for each conversation that is associated with the thread or connection. The report lists detailed information regarding the connection.

```
NAME     ST A   REQ ID               AUTHID
PLAN      ASID TOKEN
text     t  t   num text             text
text
          text
  V447--INDEX SESSID          A ST TIME
  V448--(txt) text            t tx timestamp
```

INDEX (*text*)
The index value from the location information in the V445 output line. This value provides correlation of the conversation detail information to the associated location.

SESSID *text*
The session identifier. The session identifier is either a pair of TCP/IP port numbers or a VTAM-defined session instance identifier.

TCP/IP connections
The local Db2 TCP/IP port number followed by the TCP/IP port number for the partner. The two port numbers are separated by a colon. For example: 5001:28191.

SNA partners
The VTAM-defined session instance identifier of the session on which the conversation is running. The field contains zeros if the session identifier is not applicable.

VTAM might not supply the entire session ID (SID) to Db2. The first two digits of the SID might be incorrect, in which case the SID, as presented in this message, is not acceptable in VTAM commands. If this occurs, use the VTAM DISPLAY NET,ID=*db2-luname*,SCOPE=ACT command to obtain the full SID. The DISPLAY NET command lists all sessions for the Db2 logical unit. Review the DISPLAY NET report for the complete session ID.

A *text*
A single alphabetic character that indicates activity. This field can contain one of the following values:

N
The conversation is active in the network.

W
The conversation is suspended in Db2 while it waits for the network notification that the function is complete.

Blank
All other cases.

ST *text*
The status of the conversation. This information is presented as two characters and can contain the following values:

First character

A
Conversation is in allocation.

C
Session limits are being negotiated with the partner (CNOS) prior to conversation allocation.

D
Conversation is in deallocation.

R
Receiving.

- At the requesting site, this value indicates that the conversation is receiving a response from a request.
- At the server site, this value indicates that the conversation is receiving or waiting for a request.

S
Sending.

- At the requesting site, this value indicates that the conversation can send requests to the server.
- At the server site, this value indicates that the conversation is sending or preparing to send a response.

X
Exchanging log name information with the partner before conversation allocation to determine if the partner supports protected conversations. If the thread remains in this status for an extended period of time, the Db2 service task that exchanges log names might be busy processing other requests. The Db2 DISPLAY LOCATION command (DISPLAY LOCATION(*) DETAIL) shows you conversation activity for this (RESYNC) service task.

Blank
All other cases.

Second character

1
Unprotected conversation using system-directed access is active.

2
Unprotected conversation using application-directed access is active.

3
Protected conversation using system-directed access is active.

4
Protected conversation using application-directed access is active.

5
A distributed thread is processing a secondary connection in support of an application that uses package-based continuous block fetch.

Blank
All other cases.

TIME *timestamp*
The timestamp (*yydddhhmmssth*), in local time, of the last message that was sent or received on the conversation. The timestamp consists of the following segments:

yy
Two-digit indicator for the year.

ddd
Three-digit indicator for the day of the year.

hhmmssth
Indicator for the time of the day.

V449: Information about IMS and CICS connections and RRS

When the coordinator is an IMS or CICS connection or is RRS, the output includes the following additional information about the coordinator.

```
COORDINATOR                STATUS     RESET
URID          AUTHID
text                       text       txt
hex           text
  V449-HAS NID=text AND ID=text
```

NID *text*
The network ID that is assigned by IMS or CICS, or, if the connection type is RRSAF, the RRS unit of recovery ID.

ID *text*
The correlation ID that is assigned by IMS or CICS, or, if the connection type is RRSAF, the correlation ID that is assigned by the connected application.

V450: Information about downstream participants that might be indoubt

If you specify TYPE(INDOUBT) in the DISPLAY THREAD command, the output also includes the following information about any downstream participants that might be indoubt. The indoubt participants that are listed in the output might be the result of an abnormal termination of this Db2 subsystem. The LUWID of the indoubt thread is displayed in the COORDINATOR field prior to this message.

```
COORDINATOR                STATUS     RESET
URID          AUTHID
text                       text       txt
hex           text
  V450-HAS PARTICIPANT INDOUBT AT
   text-address..number
```

HAS PARTICIPANT INDOUBT AT *text address number*
The name of a remote DBMS at which data is being accessed or where a thread is indoubt.

- *text* is the partner location name.
- *address* is the partner LU name for an SNA connection, or the dotted decimal IP address for a TCP/IP connection (nnn.nnn.nnn.nnn).
- *number* is a resynchronization port number. This token is included only if the second token is an IP address.

V451: Information about incomplete resolution of indoubt threads

Line V451 indicates that an indoubt thread was manually resolved with the RECOVER INDOUBT command, but indoubt resolution with the coordinator

is not complete. The thread remains indoubt. The LUWID of the indoubt thread is displayed in the COORDINATOR field prior to this message.

```
COORDINATOR               STATUS     RESET
URID         AUTHID
text                      text       txt
hex          text
  V451-RESYNC WITH COORDINATOR STILL PENDING
```

You must specify TYPE(INDOUBT) in the DISPLAY THREAD command for this information to be displayed.

V452: Information about heuristic commit decisions

Line V452 indicates that a decision was made at the participant to force the indoubt thread to commit without waiting for automatic resynchronization to be performed. The LUWID of the indoubt thread is displayed in the COORDINATOR field prior to this message.

```
COORDINATOR               STATUS     RESET
URID         AUTHID
text                      text       txt
hex          text
  V452-HEURISTIC COMMIT BY PARTICIPANT AT
LOCATION text
```

HEURISTIC COMMIT BY PARTICIPANT AT LOCATION *text*
The location (relational database name) where the HEURISTIC COMMIT was performed.

You must specify TYPE(INDOUBT) in the DISPLAY THREAD command for this information to be displayed.

This information is displayed until Db2 resolves the indoubt status with the coordinator. If the coordinator decision is the same as the heuristic decision of the partner, the detail line is no longer displayed.

V453: Information about heuristic abort decisions

Line V453 indicates that a decision was made at the participant to force the indoubt thread to abort without waiting for automatic resynchronization to be performed. The LUWID of the indoubt thread that was forced to abort is displayed in the COORDINATOR field prior to this message.

```
COORDINATOR               STATUS     RESET
URID         AUTHID
text                      text       txt
hex          text
  V453-HEURISTIC ABORT BY PARTICIPANT AT
LOCATION text
```

HEURISTIC ABORT BY PARTICIPANT AT LOCATION *text*
The location (relational database name) where the HEURISTIC ABORT was performed.

You must specify TYPE(INDOUBT) in the DISPLAY THREAD command for this information to be displayed.

This information is displayed until Db2 resolves the indoubt status with the coordinator. If the coordinator decision is the same as the heuristic decision of the partner, this detail line is no longer displayed.

If the coordinator status is COMMITTED and the heuristic decision of the participant is ABORT, the message continues to be displayed until it is deleted with the RESET INDOUBT command. The database administrators at all involved locations need to know that heuristic damage occurred and at which location.

V457: Information about resync protocol errors with participants

Line V457 indicates that a protocol error was detected during attempted automatic indoubt resolution with the participant. Manual resolution of an indoubt thread at the participant location might be required. The LUWID of the thread that might require manual resolution is displayed in the COORDINATOR field prior to this message.

```
COORDINATOR               STATUS     RESET
URID         AUTHID
text                      text       txt
hex          text
  V457-RESYNC PROTOCOL ERROR WITH PARTICIPANT
text
```

RESYNC PROTOCOL ERROR WITH PARTICIPANT *text*
The location where manual resolution might be needed. The location is either the relational database name or the logical unit name (LU name) of the participant.

You must specify TYPE(INDOUBT) in the DISPLAY THREAD command for this information to be displayed.

V458: Connection information for indoubt threads

If you specify TYPE(INDOUBT) in the DISPLAY THREAD command, the output contains the following connection information :

```
COORDINATOR               STATUS     RESET
URID         AUTHID
text                      text       txt
hex          text
  V458-CONNECTION-NAME text CORRELATION-ID text
```

CONNECTION-NAME*text*
The connection name that is assigned by the coordinator if the coordinator is another Db2 subsystem. The field contains the constant SERVER if the coordinator is not a Db2 subsystem.

CORRELATION-ID *text*
The correlation ID that is assigned by the coordinator if the coordinator is another Db2 subsystem. The field contains the first 12 characters of the EXTNAME parameter of the EXCSAT command that is sent by the coordinator if the coordinator is not a Db2 subsystem.

V459: Information about syncpoint protocol errors with coordinators

Line V459 indicates that a protocol error was detected during sync point processing with the coordinator. Manual resolution of an indoubt thread at this location is required. The LUWID of the thread that requires manual resolution is displayed in the COORDINATOR field prior to this message.

```
COORDINATOR                STATUS     RESET
URID          AUTHID
text                       text       txt
hex           text
   V459-SYNCPOINT PROTOCOL ERROR WITH
COORDINATOR
```

You must specify TYPE(INDOUBT) in the DISPLAY THREAD command for this information to be displayed.

V460: Information about syncpoint protocol errors with participants

Line V460 indicates that a protocol error was detected during sync point processing with the participant. Manual resolution of an indoubt thread at the participant location might be required. The LUWID of the thread that might require manual resolution at the participant is displayed in the COORDINATOR field prior to this message.

```
COORDINATOR                STATUS     RESET
URID          AUTHID
text                       text       txt
hex           text
    V460-SYNCPOINT PROTOCOL ERROR WITH
PARTICIPANT text
```

SYNCPOINT PROTOCOL ERROR WITH PARTICIPANT *text*
The location where manual resolution might be needed. The location is either the relational database name or the logical unit name (LU name) of the participant.

You must specify TYPE(INDOUBT) in the DISPLAY THREAD command for this information to be displayed.

V461: Information about heuristic damage

Line V461 indicates that indoubt resolution with the coordinator completed. Heuristic damage was detected at this location because the heuristic decision that was made at this location is different than the decision that was made at the coordinator. The thread remains indoubt. The LUWID of the thread is displayed in the COORDINATOR field prior to this message. The STATUS field shows the heuristic decision that was made at this location.

This message is displayed until it is removed by a RESET INDOUBT command.

```
COORDINATOR                STATUS     RESET
URID          AUTHID
text                       text       txt
hex           text
  V461-RESYNC WITH COORDINATOR SHOWS HEURISTIC
DAMAGE
```

You must specify TYPE(INDOUBT) in the DISPLAY THREAD command for this information to be displayed.

V462: Information about cold starts by participants

Line V462 indicates that Db2 has coordinator responsibility for an indoubt thread at the participant, and the participant informed Db2 that it performed a cold start operation and lost all knowledge of indoubt threads. Heuristic damage might have occurred at the participant. The LUWID of the indoubt thread is displayed in the COORDINATOR field prior to this message.

Use the RESET INDOUBT command to purge this message from the indoubt report. The cold-starting participant might have been coordinating downstream participants that are now indoubt. The database administrator at these participants might need to know the status of the thread at the coordinator, so that correct heuristic decisions can be made.

```
COORDINATOR                STATUS     RESET
URID          AUTHID
text                       text       txt
hex           text
  462-COLD START BY PARTICIPANT AT LOCATION text
```

COLD START BY PARTICIPANT AT LOCATION *text*
The location (relational database name) where the cold start was performed.

You must specify TYPE(INDOUBT) in the DISPLAY THREAD command for this information to be displayed.

V463: Information about cold starts by coordinators

Line V463 indicates that one of the following situations occurred:

- The coordinator for a thread that is indoubt at a Db2 subsystem was cold started and therefore lost all knowledge of indoubt threads.

- The knowledge of the local system about the coordinator was cold started, for example, by the RESET INDOUBT FORCE command.

Manual resolution of an indoubt thread at this location is required. The LUWID of the thread for which manual resolution is required is displayed in the COORDINATOR field prior to this message.

```
COORDINATOR                STATUS     RESET
URID          AUTHID
text                       text       txt
hex           text
   V463-COORDINATOR HAS COLD STARTED
```

You must specify TYPE(INDOUBT) in the DISPLAY THREAD command for this information to be displayed.

V464: Information about resync protocol errors with coordinators

Line V464 indicates that a protocol error was detected during attempted automatic indoubt resolution with the coordinator. Manual resolution of an indoubt thread at this location is required. The LUWID of the thread that requires manual resolution is displayed in the COORDINATOR field prior to this message.

```
COORDINATOR                STATUS     RESET
URID          AUTHID
text                       text       txt
hex           text
   V464-RESYNC PROTOCOL ERROR WITH COORDINATOR
```

You must specify TYPE(INDOUBT) in the DISPLAY THREAD command for this information to be displayed.

V465: Information about threads that remain in the prepared state

Line V465 indicates that the thread was prepared for the specified period of time. Db2 is the participant in the logical unit of work. Db2 has completed the first phase of commit and is waiting for the commit or abort decision to be transmitted from the coordinator for the specified period of time. This message is not included in the output until the thread is in the prepared state for 60 seconds. The thread is identified by the line that precedes this message.

You must specify TYPE (ACTIVE) in the DISPLAY THREAD command for this information to be displayed.

```
NAME     ST A   REQ ID               AUTHID
PLAN      ASID TOKEN
text     t  t   num text             text
text      hex  num
   V465-THREAD HAS REMAINED IN A PREPARED STATE
FOR timestamp
```

timestamp
The length of time that the thread was prepared, in the format *hh:mm:ss* (hours, minutes and seconds). The maximum number of reported hours is 65535, which is roughly 7.5 years. After this time period elapses, the count is reset to zero.

You can take the following actions to try to resolve this thread manually (that is, take heuristic action) if you need to release locks that are held by this thread:

1. Use the CANCEL DDF THREAD command to force the thread from the prepared state to the indoubt state. When the thread is indoubt, it is displayed in the DISPLAY THREAD TYPE(INDOUBT) report.
2. Determine the proper decision (commit or abort) by contacting the coordinator location, as shown in the display of indoubt threads.
3. Use the RECOVER INDOUBT command to heuristically commit or abort the thread.

V466: Information about how long a thread was indoubt

Line V466 indicates that the thread entered the indoubt state at the specified time. Db2 is the participant in the logical unit of work, has completed the first phase of commit, and is waiting for the commit or abort decision to be transmitted from the coordinator. However, Db2 lost communications with the coordinator. The LUWID of the thread is displayed in the COORDINATOR field prior to this message.

```
COORDINATOR                STATUS     RESET
URID          AUTHID
text                       text       txt
hex           text
  V466-THREAD HAS BEEN INDOUBT FOR timestamp
```

THREAD HAS BEEN INDOUBT FOR *timestamp*
The length of time that the thread was indoubt, in the format *hh:mm:ss* (hours, minutes and seconds). The maximum number of reported hours is 65535, which is roughly 7.5 years. After this time period elapses, the count is reset to zero.

If necessary, you can release locks that are held by this thread by performing the following actions:

1. Determine the proper decision (commit or abort) by contacting the coordinator location, as shown in the display of indoubt threads.
2. Use the RECOVER INDOUBT command to heuristically commit or abort the thread.

You must specify TYPE(INDOUBT) in the DISPLAY THREAD command for this information to be displayed.

V467: Information about distributed threads (for indoubt and postponed threads)

For indoubt and postponed distributed threads, the output includes the following additional information.

```
COORDINATOR                STATUS     RESET
URID         AUTHID
text                       text       txt
hex          text
  V467-HAS LUWID text=num
```

LUWID *text num*
The global logical unit of work ID and the local token that identifies the thread.

You must specify TYPE(INDOUBT) in the DISPLAY THREAD command for this information to be displayed.

V471: Information about available agents

Line V471 indicates that the agent is currently not associated with a remote location. In the following situations, the agent can be assigned to a process:

- The completion of a queued receive request on a type 2 inactive thread.
- A request that a new connection be established, after MAX REMOTE ACTIVE has been reached.

```
NAME     ST A   REQ ID               AUTHID
PLAN      ASID TOKEN
text     t  t   num text             text
text      hex  num
  V471-luwid=token
```

luwid=token
The global logical unit of work ID and the local token that identifies the agent.

V480 and V481: Information about the unit of recovery

When the DISPLAY THREAD command is issued with the RRSURID option, additional information is provided about the unit of recovery.

Information about the participant is provided in line V480 when the TYPE(ACTIVE) option is used.

```
NAME     ST A   REQ ID               AUTHID
PLAN      ASID TOKEN
text     t  t   num text             text
text      hex  num
  V480-DB2 IS PARTICIPANT FOR RRS URID=hex
```

URID *hex*
The Recoverable Resource Services (RRS) unit of recovery ID in which this thread participates.

Information about the coordinator is provided in line V481 when either the TYPE(ACTIVE) or the TYPE(INDOUBT) option is used.

```
NAME     ST A   REQ ID               AUTHID
PLAN      ASID TOKEN
text     t  t   num text             text
text      hex  num
  V481-DB2 IS COORDINATOR FOR RRS URID=hex
```

URID *hex*
The Recoverable Resource Services (RRS) unit of recovery ID for which this thread is coordinator.

When the V481 message is included in an INDOUBT thread report, the preceding lines indicate the status of the Db2 unit of recovery that contains the RRS unit of recovery. If manual recovery of the RRS unit of recovery is required, the outcome of the Db2 unit of recovery can determine whether to commit or rollback the RRS unit of recovery.

V482: WLM information

If you request a detail report and the thread is associated with a z/OS Workload Manager (WLM) enclave, the output includes an indication that WLM is currently applying its performance goals to the thread.

```
  V482 WLM-INFO=text
```

text
Information about the WLM characteristics that are associated with the thread. This field includes the values of the following identifiers when known, separated by colons:

- The name of the service class.
- The service class period number.
- The importance level of the period.
- The performance index of the service class period, scaled by 100. A value of 100 corresponds to a value of 1.0 in the corresponding RMF report.

An asterisk (*) indicates that the value is not known or is not applicable.

V485: Information about trusted contexts

If a thread is associated with a trusted context, the output includes the trusted context name, system authorization ID, and role.

This information is included when a non-detail report is specified.

```
NAME     ST A   REQ ID               AUTHID
PLAN      ASID TOKEN
text     t  t   num text             text
text      hex  num
  V485-TRUSTED CONTEXT=text,
       SYSTEM AUTHID=text,
       ROLE=text
```

TRUSTED CONTEXT *text*
The trusted context name.

SYSTEM AUTHID *text*
The system authorization ID that is associated with the user in the trusted context.

ROLE *text*
The role that is associated with the user in the trusted context. If the role is not defined for the trusted context, this field contains an asterisk (*).

V490: Information about suspended threads

Line V490 indicates that a thread in your system is currently suspended. This message is informational only.

```
NAME     ST A   REQ ID               AUTHID
PLAN      ASID TOKEN
text     t  t   num text             text
text      hex  num
   V490- SUSPENDED timestamp smodule soffset
smodptf-level
```

timestamp

The suspend date and time. The format is YYDDD-HH:MM:SS.HSEC.

smodule soffset* and *smodptf-level
These fields are for the use of IBM Support.

When V490 is displayed

The V490 information is displayed only when you specify TYPE(SYSTEM) in the DISPLAY THREAD command.

V492: Information about storage

The V492 line is an informational message for use by IBM Support.

```
NAME     ST A   REQ ID               AUTHID
PLAN      ASID TOKEN
text     t  t   num text             text
text      hex  num
  V492-LONG numK 64VLONG numK 64LONG numK
```

V501: Information about commands

Line V501 indicates that the system thread is currently executing the specified command. The thread is identified by the preceding lines of output.

```
NAME     ST A   REQ ID               AUTHID
PLAN      ASID TOKEN
text     t  t   num text             text
text      hex  num
V501-COMMAND EXECUTING:  text
```

text
The command that the thread is currently running.

V502: Information about Db2 exit routines

If a system thread is currently executing a Db2 exit routine that you specified, the output includes the following additional information about the thread. The thread is identified by the preceding lines of output.

```
NAME     ST A   REQ ID               AUTHID
PLAN      ASID TOKEN
text     t  t   num text             text
text      hex  num
V502-PLOCK ENGINE text EXIT,
RMID=text,FCODE=texttext
```

text
The name of the Db2 exit routine that the thread is running.

RMID=*text*, FCODE=*text text*
These fields are for the use of IBM Support.

RMID=*dec*
Resource manager identifier (RMID).

FCODE=*text*
Feature code.

text
A text description, if available.

V504: Information about threads that are terminating

If a system thread is currently terminating another thread, the output includes the following additional information about the thread. The thread is identified by the preceding lines of output.

```
NAME     ST A   REQ ID               AUTHID
PLAN      ASID TOKEN
text     t  t   num text             text
text      hex  num
V504-TERMINATING CORRID=text, CONNID=text,
HASID=text
```

CORRID=*text*
The specified correlation ID of the thread that is being terminated.

CONNID=*text*
The connection ID of the thread that is being terminated.

HASID=*text*
The home address space ID of the thread that is being terminated.

V505: Information about threads that are waiting

Line V505 indicates that a system thread is experiencing a long wait time for reading or writing data for the specified object. The thread is identified by the preceding lines of output.

```
NAME     ST A   REQ ID               AUTHID
PLAN      ASID TOKEN
text     t  t   num text             text
```

```
text      hex  num
V505-BM PROCESSING DBNAME=text, SPACE NAME=
text, PART= num
```

DBNAME=*text*
The name of the database.

SPACE NAME= *text*
The name of the table space or index space.

PART= *num*
A number that identifies the partition. For non-partitioned data sets, no value is displayed.

More detailed information about the suspended thread is reported in line V490.

V507: Information about monitoring tasks

If the thread is currently an internal Db2 monitoring task, the output includes the following additional information about the thread.

```
V507-text MONITOR, INTERVALS=monintervals,
STG=monstg, BOOSTS=monboosts, HEALTH=text
     REGION=num, AVAIL=num, CUSHION=num
```

***text* MONITOR**
The type of monitoring task: active or inactive.

monintervals*, *monstg*, *monboosts*, and *text
These fields are for the use of IBM Support.

REGION *num*
The size of the region, as a number and unit of measurement.

AVAIL *num*
The amount of available storage, as a number and unit of measurement.

CUSHION *num*
The size of the storage cushion, as a number and unit of measurement. The storage cushion is a defined portion of total storage that is available for use, but whose use triggers alerts. The purpose of the alerts is to notify administrators of unexpected storage requirements and help them manage the condition.

You must specify TYPE(SYSTEM) in the DISPLAY THREAD command for this information to be displayed.

V520: Information about autonomous procedures

When a thread is processing an autonomous procedure, the output includes the following additional information about the thread.

```
NAME     ST A   REQ ID               AUTHID
PLAN      ASID TOKEN
text     t  t   num text             text
text      hex  num
  V520-AUTONOMOUS PROCEDURE INVOKED BY THREAD
       WITH TOKEN=num
```

TOKEN *num*
The token of the invoking thread for the autonomous procedure.

Information that indicates NOT FOUND situations

If no threads or connections of the requested type are found, one of the following messages is displayed.

DSNV419I NO CONNECTIONS FOUND
The DISPLAY THREAD TYPE(*), TYPE(ACTIVE) or TYPE(INACTIVE) command was unable to locate any connections within the subsystem.

NO CONNECTION FOUND FOR NAME=*text*
The DISPLAY THREAD TYPE(ACTIVE) or TYPE(INACTIVE) command was unable to locate any connections that are associated with the indicated connection name. This message is generated once for each connection name for which no connection was found.

NO THREADS FOUND FOR NAME=*text*
The DISPLAY THREAD TYPE(ACTIVE) or TYPE(INACTIVE) command was unable to locate any threads that are associated with the indicated connection name. This message is generated once for each connection name for which no threads were found.

NO SYSTEM THREADS FOUND
The DISPLAY THREAD command did not find any system threads that can be displayed.

NO SYSTEM THREADS FOUND FOR NAME= *connection-name*
The DISPLAY THREAD command did not find any system threads for the named connection.

DSNV420I NO INDOUBT THREADS FOUND
The DISPLAY THREAD command found no indoubt threads within the system. This message is generated when the command requests information about all (*) threads that are currently residing within an indoubt state (TYPE=INDOUBT) within the system, but no threads currently exist within this state.

csect* NO INDOUBT THREADS FOUND FOR CONNECTION NAME=*text
The DISPLAY THREAD TYPE(INDOUBT) command was unable to locate any indoubt threads that are associated with the indicated connection name. This message is generated once for each connection name for which no indoubt threads were found. If you do not specify a connection name, the command uses a default connection name.

NO POSTPONED THREADS FOUND FOR NAME=*text*
The DISPLAY THREAD command found no postponed abort URs for the named connection. This message is generated when the command

requests information about threads for the given connection name that are currently residing within a postponed abort state, but no threads currently exist within this state.

DSNV434I *csect* NO POSTPONED ABORT THREADS FOUND
The DISPLAY THREAD TYPE(POSTPONED) command found no postponed abort threads.

Other information reported in the DISPLAY THREAD output

ARCHIVE LOG QUIESCE CURRENTLY ACTIVE
An ARCHIVE LOG MODE(QUIESCE) command is currently active. Updates against Db2 resources have been temporarily suspended, which might result in active threads being suspended until termination of the quiesce period.

SCOPE(GROUP) SUPPRESSED DURING RESTART AND SHUTDOWN
The DISPLAY THREAD command with the SCOPE(GROUP) option was issued during restart or shutdown. SCOPE(GROUP) is not supported during restart or shutdown. The command runs locally.

ONLY SYSTEM THREAD DATA AVAILABLE
The DISPLAY THREAD command was issued during restart or shutdown and specified a value for the TYPE option other than SYSTEM. This message indicates that only system thread information is available during restart and shutdown.

End of report markers

The DISPLAY THREAD output normally ends with message DSN9022I.

If the command is not able to complete the report, the output ends with message DSN9023I and one of the following explanations:

DSNV423I DISPLAY THREAD MESSAGE POOL SIZE EXCEEDED
The amount of CSA or ECSA virtual storage that is needed to generate DISPLAY THREAD output exceeded the maximum size of the message buffer pool.

This situation can happen when many threads exist in Db2, and the pattern-matching character '*' is used in a DISPLAY THREAD command, as shown in the following example:

```
-DISPLAY THREAD(*)
```

In this case, processing is terminated.

To correct the error, reduce the amount of CSA or ECSA virtual storage that is required for the DISPLAY THREAD command by performing one of the following actions:

- Specify qualifiers, such as TYPE(INDOUBT), TYPE(ACTIVE), or TYPE(INACTIVE).
- Specify specific *connection-name*, *location-name*, or *luwid* values.

MESSAGE LIMIT EXCEEDED. DISPLAY IS TRUNCATED.
The number of DISPLAY THREAD command messages exceeds the maximum number of permitted messages. The maximum number of messages is specified by the LIMIT option or the default value for the LIMIT option.

DISPLAY THREAD OUTPUT TO BE CONTINUED
DISPLAY THREAD command output directed to an MVS console must be continued in another group of messages. The continuation notice contains a unique command ID that is also displayed in the first line of the continuation.

```
DISPLAY THREAD OUTPUT TO BE CONTINUED (CMDID
= command-id)
```

Compare the command ID values to confirm that the continuation is from the same report.

```
DISPLAY THREAD OUTPUT CONTINUED (CMDID =
command-id)
```

Error messages

If the DISPLAY THREAD command fails, you receive one of the following messages:

***csect-name* DISPLAY THREAD*pkwname* TERMINATED, DEFAULT UNAVAILABLE**

The DISPLAY THREAD command statement did not contain all required parameters. Command processing terminates.

csect-name
The name of the control section that issued the message.

pkwname
The command primary keyword as entered by the requester.

One of the following items was not specified: *connection-name*, LOCATION, or LUWID.

Reenter the command with one of these parameters specified.

LOCATION OR LUWID KEYWORD INVALID WHEN DDF NOT STARTED
The DISPLAY THREAD TYPE(ACTIVE) command was issued with the keyword LOCATION or LUWID, but the distributed data facility (DDF) was not

started. The LOCATION or LUWID keyword can be used only if DDF is in operation.

Command processing is complete.

INVALID PARAMETER WITH LUWID KEYWORD *luwid-parameter*

The DISPLAY THREAD TYPE(ACTIVE) or DISPLAY THREAD TYPE(INACTIVE) command was issued with the keyword LUWID and its required parameter list. However, one of the parameters was syntactically invalid as a logical unit of work identifier.

The command returns without processing.

Reenter the command with valid LUWID values.

SCOPE(GROUP) DISPLAY TERMINATED DUE TO IRLM TRUNCATION

The SCOPE(GROUP) keyword was specified, and IRLM truncated the responses gathered from other members. This error is a Db2 internal error.

The DISPLAY THREAD report is terminated and processing abnormally terminates.

Notify the system programmer and contact IBM Support to report the problem.

SCOPE(GROUP) DATA UNAVAILABLE

The SCOPE(GROUP) keyword was specified, and the IRLM NOTIFY to other members has returned a bad return code.

```
SCOPE(GROUP) DATA UNAVAILABLE,
       IRLM RETURN CODE: retcode,
       IRLM REASON DATA: reason
```

retcode
Return code from IRLM on the Notify request.

reason
Reason code diagnostic information from IRLM on the Notify request.

System action

Processing continues.

Operator response

Review the information that is provided for each line of output and take any necessary action.

Related concepts

Autonomous procedures (Db2 Application programming and SQL)

TCP/IP terminology (Db2 Installation and Migration)

System Programmer's Guide to: Workload Manager (IBM Redbooks)

Related reference

-DISPLAY LOCATION (Db2) (Db2 Commands)

-DISPLAY THREAD (Db2) (Db2 Commands)

-RESET INDOUBT (Db2) (Db2 Commands)

Performance Index (MVS Programming: Workload Management Services)

Related information

DSN3201I
ABNORMAL EOT IN PROGRESS FOR USER=*xxxxxxxx* CONNECTION-ID=*yyyyyyyy* CORRELATION-ID=*zzzzzzzzzzzz* JOBNAME=*aaaaaaaa* ASID=*9999* TCB=*99999999*

DSN9022I
csect-name '*verb-namepkw-name*' NORMAL COMPLETION

DSN9023I
csect-name verb-name pkw-name ABNORMAL COMPLETION

Defining Service Classes and Performance Goals (z/OS MVS Planning: Workload Management)

Setting up a Service Definition (z/OS MVS Planning: Workload Management)

Using Performance Periods (z/OS MVS Planning: Workload Management)

DSNV402I ACTIVE THREADS -

Explanation

This message marks the beginning of a section of output from the DISPLAY THREAD command, which is part of message “DSNV401I” on page 959.

DSNV406I INDOUBT THREADS -

Explanation

This message marks the beginning of a section of output from the DISPLAY THREAD command, which is part of message “DSNV401I” on page 959.

DSNV413I *csect-name verbname pkwname* TERMINATED, DEFAULT UNAVAILABLE

Explanation

This message indicates that the command 'verbname' abnormally terminated because the command was entered from an MVS console and a required parameter was not supplied with the command.

csect-name
The name of the command program CSECT that issued the message.

verbname
The command verb as entered by the requester. The error depends on which command was entered.

- DISPLAY THREAD - neither the 'connection-name', LOCATION, nor LUWID was specified.
- RECOVER INDOUBT - neither 'connection-name' nor LUWID was specified.

pkwname
The command primary keyword as entered by the requester.

System action

Command processing terminates.

Operator response

Reenter the command specifying one of the required parameters.

DSNV414I THREAD *xxx* COMMIT SCHEDULED

Explanation

In this message, 'xxx' is the recovery identifier specified with the -RECOVER INDOUBT command to identify the indoubt thread and is one of the following:

ID=
The recovery correlation-id specified with the command.

NID=
The recovery network-id specified with the command.

LUWID =
Luwid=token indicates the luwid and token that identify the thread specified with the command.

System action

The thread specified on the -RECOVER INDOUBT command is scheduled for COMMIT recovery action.

DSNV415I THREAD *xxx* ABORT SCHEDULED

Explanation

In this message, 'xxx' is the recovery identifier specified with the -RECOVER INDOUBT command to identify the indoubt thread and is one of the following:

ID=
The recovery correlation-id specified with the command.

NID=
The recovery network-id specified with the command.

LUWID =
The luwid=token indicates the luwid and token that identify the thread specified with the command.

The thread specified on the -RECOVER INDOUBT command is scheduled for ABORT recovery action.

System action

Command processing continues.

DSNV416I THREAD NID=*net-node.number* IS INVALID

Explanation

In this message, 'net-node' is the recovery 'network-id' specified with the command.

The -RECOVER INDOUBT command (NID=net-node.number) determined that the input format for the specified network-id is invalid.

System action

Command processing continues.

Operator response

Prior to reentering the command, ensure that the network-id entered is in the correct format as specified on the -RECOVER INDOUBT command.

DSNV417I THREAD *xxx* NOT FOUND

Explanation

In this message, 'xxx' is the recovery identifier specified with the -RECOVER INDOUBT command to identify the indoubt thread and is one of the following:

ID=
The recovery correlation-id specified with the command

NID=
The recovery network-id specified with the command

LUWID =
The luwid or token specified with the command

The -RECOVER INDOUBT command was unable to locate the specified thread to be scheduled for recovery. Either the thread identifier is incorrect, or the thread no longer is in an indoubt state.

System action

Command processing continues.

Operator response

Before reentering the command, ensure that the thread still is in an indoubt state.

DSNV418I RECOVER INDOUBT REJECTED FOR ID= *correlation-id*

Explanation

In this message, 'ID=' indicates the recovery 'correlation-id' specified with the command.

The -RECOVER INDOUBT command determined that more than one 'network-id' is associated with the specified 'correlation-id'. No recovery action is taken against the indoubt threads associated with the 'correlation-id'.

System action

Command processing continues.

Operator response

To indicate the specific indoubt thread to be scheduled for resolution, the 'network-id' associated with the thread must be specified.

DSNV419I NO CONNECTIONS FOUND

Explanation

The -DISPLAY THREAD command found no active or inactive connections within the system. This message is generated when the command requests thread information for all (TYPE=*), active (TYPE=ACTIVE), or inactive (TYPE=INACTIVE) connections within the system, but no active or inactive connections currently exist.

System action

Command processing continues.

DSNV420I NO INDOUBT THREADS FOUND

Explanation

The -DISPLAY THREAD command found no indoubt threads within the system. This message is generated when the command requests information about all (*) threads currently residing within an indoubt state (TYPE=INDOUBT) within the system, but no threads currently exist within this state.

System action

Command processing continues.

DSNV423I DISPLAY THREAD MESSAGE POOL SIZE EXCEEDED

Explanation

The amount of CSA or ECSA virtual storage that was needed to generate a DISPLAY THREAD response display exceeded the maximum size of the message buffer pool.

This can happen when there are many threads in Db2, and the pattern-matching character '*' is used in a DISPLAY THREAD command. For example:

```
-DISPLAY THREAD(*)
```

System action

Processing is terminated.

Operator response

Refer to the User Response.

User response

Reduce the amount of CSA or ECSA virtual storage that is required for the DISPLAY THREAD command. You can do that by:

- Specifying qualifiers, such as TYPE(INDOUBT), TYPE(ACTIVE), or TYPE(INACTIVE)
- Specifying specific *connection-name*, *location-name*, or *luwid* values

DSNV424I INACTIVE THREADS -

Explanation

This message marks the beginning of a section of output from the DISPLAY THREAD command, which is part of message “DSNV401I” on page 959.

DSNV426I *csect-name* THREAD *token* HAS BEEN CANCELED

Explanation

This message is issued in response to the CANCEL THREAD command. The thread is scheduled for termination.

System action

The specified thread is scheduled for termination. The termination of the thread does not occur unless processing is occurring within Db2.

DSNV427I ***csect-name*** **INVALID THREAD** ***token*** **SPECIFIED**

Explanation

This message is issued in response to the CANCEL THREAD command. No thread with the specified *token* was found.

System action

The specified thread is not canceled.

User response

Determine the correct *token* of the thread you want to cancel and reissue the command. You can use the -DISPLAY THREAD command to display all thread activity.

DSNV428I ***csect-name*** **THREAD** ***token*** **WAS PREVIOUSLY CANCELED**

Explanation

The thread with the specified token was previously canceled by either the CANCEL THREAD or CANCEL DDF THREAD command, or is already in the process of termination.

The CANCEL command terminates the thread only if the thread is processing in Db2 or is currently suspended by Db2. The thread might not be processing in Db2 in these situations:

- The thread is processing in the application and has not made a request to Db2. The DISPLAY THREAD command indicates this.
- The user placed the thread on an MVS resource using the ENQUE command. The CANCEL command has no effect on the thread until ENQUE completes and the thread returns to Db2.
- The thread is processing in VTAM and is waiting for a response from a partner. The DISPLAY THREAD DETAIL command indicates this. The thread does not terminate until VTAM returns to Db2. VTAM commands, which will terminate the session or LU, can be used to cause VTAM to return to Db2.

DSNV429I **V429 CALLING PROCEDURE=*text*, LOAD MODULE=*text*, PROC=*text*, ASID=*hex*, WLM_ENV=*text***

Explanation

This message contains detail output from the DISPLAY THREAD command, which is part of message “DSNV401I” on page 959.

DSNV431I **POSTPONED ABORT THREADS -**

Explanation

This message marks the beginning of a section of output from the DISPLAY THREAD command, which is part of message “DSNV401I” on page 959.

DSNV434I ***csect-name*** **NO POSTPONED ABORT THREADS FOUND**

Explanation

This message is issued by the RECOVER POSTPONED command, automatic online backout processing (invoked by restarting with system parameter LBACKOUT=AUTO), and also by the DISPLAY THREAD TYPE(POSTPONED) command. It indicates that no postponed abort threads were found to process. The 'csect-name' is the name of the command program CSECT that issued the message.

System action

The command (or auto-resolution processing) completes normally.

Related information

DSNV401I
DISPLAY THREAD REPORT FOLLOWS -

DSNV435I ***action*** **OF POSTPONED ABORT URS HAS BEEN SCHEDULED**

Explanation

This message is issued by the RECOVER POSTPONED command, and also by automatic online backout processing (invoked by restarting with system parameter LBACKOUT=AUTO). It indicates that postponed abort URs exist and their backout processing will proceed asynchronously.

ACTION
Description of request

RESOLUTION
Indicates that backout processing for the postponed units of recovery has been requested.

CANCELLATION
Indicates that the CANCEL option was specified on the RECOVER POSTPONED command and that the backout process will be canceled.

System action

The command (or auto-resolution processing) completes normally.

DSNV436I **V436-PGM=*text*, SEC=*num*, STMNT=*num*, THREAD-INFO=*text***

Explanation

This message contains detail output from the DISPLAY THREAD command, which is part of message "DSNV401I" on page 959.

DSNV437I **V437-WORKSTATION=*text* USERID=*text* APPLICATION NAME =*text***

Explanation

This message contains detail output from the DISPLAY THREAD command, which is part of message "DSNV401I" on page 959.

DSNV439I ***csect-name* NOBACKOUT OPTION INVALID FOR THREAD *'token'***

Explanation

This message is issued in response to the CANCEL THREAD command with the NOBACKOUT option. The NOBACKOUT option will not be honored because the canceled thread is part of a global transaction.

System action

The specified thread is not canceled.

DSNV440I **V440-XID=*hex***

Explanation

This message contains detail output from the DISPLAY THREAD command, which is part of message "DSNV401I" on page 959.

DSNV441I **V441-ACCOUNTING=*text***

Explanation

This message contains detail output from the DISPLAY THREAD command, which is part of message "DSNV401I" on page 959.

DSNV442I **V442-CRTKN=*text***

Explanation

This message contains detail output from the DISPLAY THREAD command, which is part of message "DSNV401I" on page 959.

DSNV444I **V444-*text*=*num* ACCESSING DATA AT.**

Explanation

This message contains detail output from the DISPLAY THREAD command, which is part of message "DSNV401I" on page 959.

DSNV445I **V445-*text*=*num* ACCESSING DATA FOR *location***

Explanation

This message contains detail output from the DISPLAY THREAD command, which is part of message "DSNV401I" on page 959.

DSNV447I **V447--INDEX SESSID A ST TIME**

Explanation

This message contains detail output from the DISPLAY THREAD command, which is part of message "DSNV401I" on page 959.

DSNV448I **V448--(*txt*) *text t tx timestamp***

Explanation

This message contains detail output from the DISPLAY THREAD command, which is part of message "DSNV401I" on page 959.

DSNV449I **V449-HAS NID=*text* AND ID=*text***

Explanation

This message contains detail output from the DISPLAY THREAD command, which is part of message "DSNV401I" on page 959.

DSNV450I **V450-HAS PARTICIPANT INDOUBT AT *text-address..number***

Explanation

This message contains detail output from the DISPLAY THREAD command, which is part of message "DSNV401I" on page 959.

DSNV451I **V451-RESYNC WITH COORDINATOR STILL PENDING**

Explanation

This message contains detail output from the DISPLAY THREAD command, which is part of message "DSNV401I" on page 959.

DSNV452I **V452-HEURISTIC COMMIT BY PARTICIPANT AT LOCATION *text***

Explanation

This message contains detail output from the DISPLAY THREAD command, which is part of message "DSNV401I" on page 959.

DSNV453I **V453-HEURISTIC ABORT BY PARTICIPANT AT LOCATION *text***

Explanation

This message contains detail output from the DISPLAY THREAD command, which is part of message "DSNV401I" on page 959.

DSNV454I **LOCATION OR LUWID KEYWORD INVALID WHEN DDF NOT STARTED**

Explanation

The DISPLAY THREAD command was issued with the LUWID or LOCATION keyword, but the distributed data facility (DDF) was not started.

System action

The command returns without processing.

Operator response

Reenter the command without the LUWID or LOCATION keyword if you do not intend to do distributed data processing on the subsystem. If you intend to do distributed data processing on the subsystem, ensure that the distributed data facility is configured. Then issue the -START DDF command to start the distributed data facility before issuing the command with the LUWID or LOCATION keyword.

Related tasks

Connecting distributed database systems (Db2 Installation and Migration)

Related reference

-DISPLAY THREAD (Db2) (Db2 Commands)

-START DDF (Db2) (Db2 Commands)

DSNV456I **INVALID PARAMETER WITH LUWID KEYWORD *luwid-parameter***

Explanation

The DISPLAY THREAD TYPE(ACTIVE), DISPLAY THREAD TYPE(INACTIVE), or the RECOVER INDOUBT command was issued with the keyword LUWID and its required parameter list. However, one of the parameters was syntactically invalid as a logical-unit-of-work identifier.

System action

The command returns without processing.

Operator response

Reenter the command with valid LUWID values.

Related reference

-DISPLAY THREAD (Db2) (Db2 Commands)

-RECOVER INDOUBT (Db2) (Db2 Commands)

DSNV457I **V457-RESYNC PROTOCOL ERROR WITH PARTICIPANT *text***

Explanation

This message contains detail output from the DISPLAY THREAD command, which is part of message "DSNV401I" on page 959.

DSNV458I **V458-CONNECTION-NAME *text* CORRELATION-ID *text***

Explanation

This message contains detail output from the DISPLAY THREAD command, which is part of message "DSNV401I" on page 959.

DSNV459I **V459-SYNCPOINT PROTOCOL ERROR WITH COORDINATOR**

Explanation

This message contains detail output from the DISPLAY THREAD command, which is part of message "DSNV401I" on page 959.

DSNV460I **V460-SYNCPOINT PROTOCOL ERROR WITH PARTICIPANT *location***

Explanation

This message contains detail output from the DISPLAY THREAD command, which is part of message "DSNV401I" on page 959.

DSNV461I **V461-RESYNC WITH COORDINATOR SHOWS HEURISTIC DAMAGE**

Explanation

This message contains detail output from the DISPLAY THREAD command, which is part of message "DSNV401I" on page 959.

DSNV462I **V462-COLD START BY PARTICIPANT AT LOCATION *text***

Explanation

This message contains detail output from the DISPLAY THREAD command, which is part of message "DSNV401I" on page 959.

DSNV463I **V463-COORDINATOR HAS COLD STARTED**

Explanation

This message contains detail output from the DISPLAY THREAD command, which is part of message "DSNV401I" on page 959.

DSNV464I **V464-RESYNC PROTOCOL ERROR WITH COORDINATOR**

Explanation

This message contains detail output from the DISPLAY THREAD command, which is part of message "DSNV401I" on page 959.

DSNV465I **V465-THREAD HAS REMAINED IN A PREPARED STATE FOR *timestamp***

Explanation

This message contains detail output from the DISPLAY THREAD command, which is part of message "DSNV401I" on page 959.

DSNV466I **V466-THREAD HAS BEEN INDOUBT FOR *timestamp***

Explanation

This message contains detail output from the DISPLAY THREAD command, which is part of message "DSNV401I" on page 959.

DSNV467I **V467-HAS LUWID *text=num***

Explanation

This message contains detail output from the DISPLAY THREAD command, which is part of message "DSNV401I" on page 959.

DSNV471I **V471-*luwid=token***

Explanation

This message contains detail output from the DISPLAY THREAD command, which is part of message "DSNV401I" on page 959.

DSNV473I **ACTIVE THREADS FOUND FOR MEMBER: *memname-***

Explanation

In the DISPLAY THREAD output, message DSNV473I precedes the list of active threads found on another member of a data sharing group. This output is part of message "DSNV401I" on page 959.

DSNV474I **INDOUBT THREADS FOUND FOR MEMBER: *memname-***

Explanation

In the DISPLAY THREAD output, message DSNV474I precedes the list of indoubt threads found on another member of a data sharing group. This output is part of message "DSNV401I" on page 959.

DSNV475I **INACTIVE THREADS FOUND FOR MEMBER: *memname-***

Explanation

In the DISPLAY THREAD output, message DSNV475I precedes the list of inactive threads found on another member of a data sharing group. This output is part of message "DSNV401I" on page 959.

DSNV476I **POSTPONED ABORT THREADS FOUND FOR MEMBER: *memname***

Explanation

In the DISPLAY THREAD output, message DSNV476I precedes the list of postponed abort units of recovery found on another member of a data sharing group. This output is part of message "DSNV401I" on page 959.

DSNV480I **V480-DB2 IS PARTICIPANT FOR RRS URID=*hex***

Explanation

This message contains detail output from the DISPLAY THREAD command, which is part of message "DSNV401I" on page 959.

DSNV481I **V481-DB2 IS COORDINATOR FOR RRS URID=*hex***

Explanation

This message contains detail output from the DISPLAY THREAD command, which is part of message "DSNV401I" on page 959.

DSNV482I **V482 WLM-INFO=*text***

Explanation

This message contains detail output from the DISPLAY THREAD command, which is part of message "DSNV401I" on page 959.

DSNV485I **V485-TRUSTED CONTEXT=*text*, SYSTEM AUTHID=*text*, ROLE =*text***

Explanation

This message contains detail output from the DISPLAY THREAD command, which is part of message "DSNV401I" on page 959.

DSNV490I **V490- SUSPENDED *timestamp smodule soffset smodptf-level***

Explanation

This message contains detail output from the DISPLAY THREAD command, which is part of message "DSNV401I" on page 959.

DSNV492I **V492-LONG *num*K 64VLONG *num*K 64LONG *num*K**

Explanation

This message contains detail output from the DISPLAY THREAD command, which is part of message "DSNV401I" on page 959.

DSNV496I **ONLY SYSTEM THREAD DATA AVAILABLE**

Explanation

You issued the -DISPLAY THREAD command during restart or shutdown, and specified a TYPE other than SYSTEM. This message indicates that only system thread information is available during restart and shutdown.

System action

Command processing continues.

DSNV497I **SYSTEM THREADS -**

Explanation

This message marks the beginning of a section of output from the DISPLAY THREAD command, which is part of message "DSNV401I" on page 959.

DSNV501I **COMMAND EXECUTING: *text***

Explanation

This message contains detail output from the DISPLAY THREAD command, which is part of message "DSNV401I" on page 959.

DSNV502I **V502-PLOCK ENGINE *text* EXIT, RMID=*text*,FCODE=*texttext***

Explanation

This message contains detail output from the DISPLAY THREAD command, which is part of message "DSNV401I" on page 959.

DSNV503I **SYSTEM THREADS FOUND FOR MEMBER: *memname***

Explanation

In the DISPLAY THREAD output, message DSNV503I precedes the list of system threads found on another member of a data sharing group. This output is part of message "DSNV401I" on page 959.

DSNV504I **V504-TERMINATING CORRID=*text*, CONNID= *text*, HASID= *text***

Explanation

This message contains detail output from the DISPLAY THREAD command, which is part of message "DSNV401I" on page 959.

DSNV505I **V505-BM PROCESSING DBNAME=*dbname*, SPACE NAME= *spname*, PART= *partno***

Explanation

The system thread that is identified in the DSNV402I message, which is issued before this message is issued, is experiencing a long wait reading or writing data for the specified database name, space name *spname*, and part. For non-partitioned data sets, *partno* will not be available. Detailed suspend data can be found in message DSNV490I.

DSNV507I **V507- *active, inactive* MONITOR, INTERVALS=*monintervals*, STG=*monstg*, BOOSTS=*monboosts*, HEALTH=*text***

Explanation

This message contains detail output from the DISPLAY THREAD command, which is part of message "DSNV401I" on page 959.

DSNV508I **DSNVMON - DB2 DBM1 BELOW THE BAR STORAGE *alert-level***

Explanation

The DBM1 address space is consuming a large amount of available 31-bit, below-the-bar storage.

alert-level
An indication of severity, either NOTIFICATION or WARNING.

The message is followed by information about current resource availability:

```
DSNVMON - DB2 DBM1 BELOW THE BAR STORAGE
            alert-level
          total-consumption% CONSUMED
          db2-consumption% CONSUMED BY DB2
          storage-availableM AVAILABLE OUT OF
             REGION SIZE region-sizeM
          WITH A cushion-sizeM STORAGE CUSHION
```

total-consumption
The percentage of below-the-bar storage that is in use.

db2-consumption
The percentage of below-the-bar storage that is in use by Db2.

storage-available
The amount of available storage, measured in megabytes.

region-size
The region size, measured in megabytes.

cushion-size
Amount of storage reserved for use by MVS and critical processes.

System action

Processing continues.

Operator response

Take the appropriate action based on the *alert-level* value in message DSNV508I.

NOTIFICATION
Monitor workload on the system and look for instances of message DSNV508I where *alert-level* is WARNING. Consider reducing the workload on the system.

WARNING
Reduce the workload on the system. If storage consumption continues to increase, performance might degrade and non-critical thread processing might abend.

DSNV509I **DSNVMON - DB2 *monitor-name* INTERNAL MONITOR STOPPING**

Explanation

An internal Db2 monitor task is terminating due to errors.

monitor-name
The address space in which the monitor task was running.

System action

Db2 terminates with reason code 00E50731.

Administrator response

This message is for serviceability. However, the stop is likely caused by a series of other abends. For those abends, you should provide LOGREC data and any dumps from the Db2 subsystem to IBM Software Support.

Related concepts
Retention of Db2 dump data sets (Collecting data)
Related tasks
Preserving LOGREC data (Collecting data)
Related information
00E50731 (Db2 Codes)

DSNV510I **DSNVMON - BEGIN DISPLAY OF DBM1 LARGEST STORAGE CONSUMERS**

Explanation

A summary of the agents that consume the largest amount of DBM1 31-bit, below-the-bar storage follows, in a series of DSNV512I messages.

System action:
Processing continues.

DSNV511I **DSNVMON - END DISPLAY OF DBM1 LARGEST STORAGE CONSUMERS**

Explanation

A summary of the agents that consume the largest amount of DBM1 31-bit, below-the-bar storage precedes this message.

System action:
Processing continues.

DSNV512I **DSNVMON - AGENT *agentnumber*:**

```
NAME ST A  REQ ID AUTHID PLAN ASID TOKEN
---- -- -  --- -- ------ ---- ---- -----
f1   f2 f3 f4  f5 f6     f7   f8   f9
LONG ctlongstgK VLONG ctvlongstgK 64BIT
ct64bstgK
```

Explanation

The agent that is described in this message is the *agentnumber* consumer of 31-bit, below-the-bar storage in the DBM1 address space. Agent identification fields are:

Field label	Field value
f1	*name*
f2	*status*
f3	*act-id*
f4	*req-ct*
f5	*corr-id*
f6	*auth-id*
f7	*pname*
f8	*asid*
f9	*token*

See DSNV401I for an explanation of *name*, *status*, *act-ind*, *req-ct*, *corr-id*, *auth-id*, *pname*, *asid*, and *token*. All other fields are for use by IBM Support.

Related information
DSNV401I
DISPLAY THREAD REPORT FOLLOWS -

DSNV516I ***csect-name*** **- BEGINNING STORAGE CONTRACTION MODE**

Explanation

Db2 has detected paging and begins to free real frames for unused cached virtual storage pages that are owned by Db2.

csect-name
The name of the control section that issued the message.

System action

Processing continues.

User response

No action is required.

DSNV517I ***csect-name*** **- ENDING STORAGE CONTRACTION MODE**

Explanation

Db2 has detected paging has ceased and begins to cache unused virtual pages.

csect-name
The name of the control section that issued the message.

System action

Processing continues.

User response

No action is required.

DSNV519I ***csect-name*** **CANCEL THREAD COMMAND WITH FORCE OPTION FOR** ***token-id*** **HAS COMPLETED WITH RETURN CODE** ***return-code***

Explanation

The CANCEL THREAD command has been issued with the FORCE option. The *return-code* indicates the results of the command.

csect-name
The name of the control section that issued the message.

token-id
Either a thread identifier or a logical unit of work identifier (LUWID) returned from the DISPLAY THREAD command.

return-code
A numeric value that indicates the success or failure of the CANCEL THREAD command.

X'0000
The CANCEL THREAD command successfully completed. The *token-id* was cancelled.

X'0001
The CANCEL THREAD command was not accepted. The FORCE option is not allowed until a CANCEL THREAD without the FORCE option is first attempted.

X'0002
The CANCEL THREAD command was not accepted. The CANCEL THREAD command with the FORCE option for the same *token-id* cannot be repeated.

X'0003
The CANCEL THREAD command was not accepted. The *token-id* cannot be found.

X'0004
The CANCEL THREAD command was not accepted. The *token-id* is associated with a DDF disconnected Database Access Thread (DBAT) on the Db2 server.

System action

The command completes processing as indicated by the *return-code*.

System programmer response

Take the action that corresponds to the *return-code* value:

X'0000'
The command was success, no action is required.

X'0001'
Issue the CANCEL THREAD command without the FORCE option.

X'0002'
Wait to determine if the original CANCEL THREAD completes successfully.

X'0003'
Use the DISPLAY THREAD command to identify a DDF related Database Access Thread (DBAT) on the Db2 server. Ensure the level of z/OS in your Db2 environment supports function to terminate a preemptable SRB. Then reissue the command.

X'0004'
Use the DISPLAY THREAD command to identify a DDF related Database Access Thread (DBAT) on the Db2 server. Then reissue the command.

Related reference

-CANCEL THREAD (Db2) (Db2 Commands)

-DISPLAY THREAD (Db2) (Db2 Commands)

DSNV520I V520-AUTONOMOUS PROCEDURE INVOKED BY THREAD WITH TOKEN = *num*

Explanation

This message contains detail output from the DISPLAY THREAD command, which is part of message "DSNV401I" on page 959.

DSNV522I *csect-name* - BEGIN DISPLAY OF OLDEST LATCH WAITERS CAUSING A BOOST

Explanation

A long wait time for a latch caused the priority of a latch holder to be boosted. This message indicates the start of the summary of waiters that resulted in the boost. It is followed by a DSNV523I message for each of the 10 oldest waiters that resulted in the boost.

csect-name
The name of the control section that issued the message.

System action

Processing continues.

User response

No action is required.

Related information

DSNV523I
csect-name - AGENT *agent-number*:

DSNV526I
csect-name - END DISPLAY OF OLDEST LATCH WAITERS CAUSING A BOOST

DSNV523I *csect-name* - AGENT *agent-number*:

Explanation

This message displays information about agents that caused the priority of a latch holder to be boosted because of a long wait time for a latch.

```
NAME ST A REQ ID AUTHID PLAN ASID TOKEN
---- -- - --- -- ------ ---- ---- -----
text t  t num text text text hex  num
V491-LATCH latch-addr latch-asid latch-status hldr-
jobname hldr-asid hldr-corr-id
V490-SUSPENDED timestamp smodule soffset smodptf-
level
```

csect-name
The name of the control section that issued the message.

NAME *text*
The connection name that was used to establish the thread.

If the connection status value is "D", the connection name is either the connection name for the allied address space or the Db2 subsystem name.

For distributed database access threads, this field contains the following information:

requester-value
For threads that access the server from a Db2 for z/OS requester, this value is the connection name of the thread at the requesting location.

SERVER
For threads that access the server from a non-Db2 for z/OS requester, no connection name is identified.

blank
For threads where the originating task is running on the same Db2 subsystem, this value is blank.

When the connection name value is blank, the expected connection status value is "PT".

ST *t*
A one- or two-letter code that indicates connection status. Possible values are:

AC
A thread is executing in an accelerator server. This status is displayed until accelerator processing concludes and returns control to Db2.

AT
A thread that processes an autonomous procedure.

D
The thread is in the process of termination as a result of the termination of the associated allied task. If this thread is also the last (or only) Db2 thread for the address space, the associated allied task is placed in a wait state.

For an active thread, this value can indicate possible problems with Db2. If the activity indicator value is *, use the information in message DSN3201I to identify and resolve any problems.

DA
The database access thread slot is currently not associated with a remote connection and is available to be assigned to a type 2 inactive thread.

DI
The thread is disconnected from an execution unit. No TCB is associated with the Db2 thread.

This value is possible is only when the connection name is "RRSAF".

N
The thread is in either IDENTIFY or SIGNON status.

This value is accompanied by a token value of "0".

ND
The thread is in either IDENTIFY or SIGNON status, and the thread is currently not associated with any TCB.

PT
A parallel task thread was established (plan allocated).

QD
The thread is queued for termination as a result of the termination of the associated allied task. If this thread is also the last (or only) Db2 thread for the address space, the associated allied task is placed in a wait state.

For an active thread, this value can indicate possible problems with Db2. If the activity indicator value is *, use the information in message DSN3201I to identify and resolve any problems.

QT
The CREATE THREAD request was queued. The associated allied task is placed in a wait state.

R2
A distributed thread is accessing a remote site on behalf of a request from another location. The thread is currently an inactive connection (type 2 inactive thread) and is waiting for an agent to become available.

RA
A distributed thread is accessing a remote site on behalf of a request from another location.

RK
A distributed thread is accessing a remote site on behalf of a request from another location. The thread is performing an operation that invoked Kerberos services. This status is displayed until Kerberos services returns control to Db2.

RN
A distributed thread is accessing a remote site on behalf of a request from another location. The request accesses data at another Db2 location. Therefore, the thread was suspended until Db2 connects to the partner location (establishes Db2 system conversations with the partner).

When another Db2 site is being contacted for the first time using system-directed access, Db2 must establish Db2 system conversations with the partner location. A request is presented to a Db2 DDF service task that establishes a system conversation. The thread is suspended until the request is processed. If the thread remains in this status for an extended period of time, the Db2 service task that establishes the system conversations might be busy processing other requests. The Db2 DISPLAY LOCATION command (DISPLAY LOCATION(*) DETAIL) shows conversation activity for this Db2 system conversation (SYSCON-O) service task.

RQ
A distributed thread is accessing a remote site on behalf of a request from another location.

The thread is suspended for one of the following reasons:

- The maximum number of active database access threads was reached. The number of threads is described by the MAX REMOTE ACTIVE value of the DSN6SYSP macro in the Db2 startup parameter, usually DSNZPARM.

- The system profile monitoring threshold was reached. The threshold is described in the DSN_PROFILE_ATTRIBUTES table.

Database access agents (DBAAs) are queued until other DBAAs deallocate or go inactive, providing an available slot. The DBAA resumes when a slot becomes available, and the DBAA is next in the queue.

Consider increasing the MAX REMOTE ACTIVE value.

RX
The distributed thread is executing an XA transaction on behalf of a request from another location.

SP
A thread is running within a stored procedure. This status value is displayed until the stored procedure terminates and returns control to Db2.

SW
A thread is waiting for a stored procedure to be scheduled. This status value is displayed until the stored procedure begins to run.

T
An allied, nondistributed thread was established (plan allocated).

TD
An allied thread was established (plan allocated), and the thread is currently not associated with any TCB.

TN
An allied thread was distributed to access data at another Db2 location, but it was suspended because Db2 was not connected to the partner location.

When another Db2 site is being contacted for the first time using system-directed access, Db2 must establish Db2 system conversations with the partner location. A request is presented to a Db2 DDF service task that establishes a system conversation. The thread is suspended until the request is processed. If the thread remains in this status for an extended period of time, the Db2 service task that establishes the system conversations might be busy processing other requests. The Db2 DISPLAY LOCATION command (DISPLAY LOCATION(*) DETAIL) shows conversation activity for this Db2 system conversation (SYSCON-O) service task.

TR
An allied thread was distributed to access data at another location.

A *t*
An indicator that the thread is active within Db2. *t* can have one of the following values:

*****
The thread is active.

blank
The thread is inactive.

REQ *num*
A counter that shows the number of Db2 requests. This counter restarts at 1 when the count exceeds 32767 requests.

ID *text*
The recovery correlation ID that is associated with the thread.

For distributed database access threads, this field contains one of the following values:

028.DBAA *nn*
This value indicates that the database access agent (DBAA) is performing connection processing, which consists of establishing the DBAA thread and validating and verifying the user's ID.

RACF requests are serialized on one of the Db2 RACF service tasks. This serialization might increase the validation time when multiple DBAAs are being created concurrently.

This value is possible only while the thread is being created.

requester-value
For threads that use system-directed access or application-directed access from a Db2 requester, this value is the correlation ID of the thread at the requesting location.

This value is possible only after the thread has been created.

external-name
For threads that use application-directed access from a non-Db2 requester, this value is the first 12 characters in the DDM external name (EXTNAM) parameter of the DDM EXCSAT command that is received as part of the SQL CONNECT statement.

This value is possible only after the thread has been created.

AUTHID *text*
The authorization ID that is associated with a signed-on connection.

PLAN *text*
The plan name that is associated with the thread.

For distributed database access threads, this field contains one of the following values:

DISTSERV
For threads that use application-directed access from a non-Db2 requester, no plan name is identified.

requester-value
For threads that use system-directed access or application-directed access from a Db2 requester, this value is the plan name that is being executed at the requesting location.

For RRSAF connected threads that did not specify a plan name at connect time, the value ?RRSAF is displayed.

If a thread was not established, this field is blank.

If this value is a system plan, see the information about system plans in message DSNT376I.

ASID *hex*
The address space ID (ASID) of the home address space. This value is a hexadecimal number of up to four characters.

TOKEN *num*
The thread token that is assigned to the thread.

For threads with a connection status value of "N", this value is "0".

If multiple threads have the same token, those threads are processing secondary connections in support of an application that uses package-based continuous block fetch.

V490: Information about suspended threads

Line V490 indicates that a thread in your system is currently suspended. This message is informational only.

```
NAME     ST A   REQ ID               AUTHID
PLAN      ASID TOKEN
text     t  t   num text             text
text      hex  num
   V490- SUSPENDED timestamp smodule soffset
smodptf-level
```

timestamp

The suspend date and time. The format is YYDDD-HH:MM:SS.HSEC.

smodule soffset* and *smodptf-level
These fields are for the use of IBM Support.

V491

Line V491 is for the use of IBM software support.

System action

Processing continues.

User response

No action is required.

Related information

DSNV401I
DISPLAY THREAD REPORT FOLLOWS -

DSNV522I
csect-name - BEGIN DISPLAY OF OLDEST LATCH WAITERS CAUSING A BOOST

DSNV526I
csect-name - END DISPLAY OF OLDEST LATCH WAITERS CAUSING A BOOST

DSNV526I *csect-name* - END DISPLAY OF OLDEST LATCH WAITERS CAUSING A BOOST

Explanation

This message indicates the end of the summary of agents that caused the priority of a latch holder to be boosted because of a long wait time for a latch.

csect-name
The name of the control section that issued the message.

System action

Processing continues.

User response

No action is required.

Related information

DSNV522I
csect-name - BEGIN DISPLAY OF OLDEST LATCH WAITERS CAUSING A BOOST

DSNV523I
csect-name - AGENT *agent-number*:

Chapter 18. DSNW messages

Message identifiers that begin with DSNW communicate information about the instrumentation facility.

DSNW001I ASYNCHRONOUSLY GATHERED DATA IS BEING FORMATTED IN THIS DUMP

Explanation

The subsystem formatting exit is not using Db2 summary dump records for formatting. The formatted control blocks may not contain the same values as they did at the time of the error.

System action

Dump formatting continues.

System programmer response

If you want Db2 summary dump records to be used, do not specify the 'SUMDUMP=NO' operand on the dump control statement.

DSNW002I SUMMARY DUMP RECORDS ARE BEING FORMATTED IN THIS DUMP

Explanation

The subsystem formatting exit is using Db2 summary dump record information to format its control blocks.

System action

Dump formatting continues.

System programmer response

If you do not want Db2 summary dump records to be used in formatting, specify the 'SUMDUMP=NO' and 'SUBSYS=subsystem name' on the dump control statement. Both operands are required.

DSNW004I ONE OR MORE INVALID OPERANDS WERE FOUND ON THE DSNWDMP CONTROL CARD. SUBSYSTEM FORMATTING TERMINATED

Explanation

An invalid operand was found on the dump control statement. The operand was not 'SG', 'LG', 'SA', 'AA', or 'ALL'.

System action

Control returns to AMDPRDMP or IPCS to terminate the exit.

System programmer response

Correct the dump control statement operand specified by message DSNW007I.

DSNW005I DUMP FORMATTER WORK BUFFER (DSNWDBUF) CANNOT BE LOCATED

Explanation

The subsystem formatting exit could not locate its work buffer.

System action

Control returns to AMDPRDMP or IPCS to terminate the exit.

System programmer response

Increase the region size.

DSNW006I THE ERLY BLOCK CANNOT BE ACCESSED OR IT IS INVALID

Explanation

The subsystem formatting exit could not locate its anchor block.

System action

Control returns to AMDPRDMP or IPCS to terminate the exit.

System programmer response

Specify 'SUBSYS=subsystem name', 'SUMDUMP=NO' on the dump control statement. The subsystem name should have between 1 and 4 characters.

DSNW007I THE FOLLOWING OPERAND SPECIFIED ON THE DSNWDMP CONTROL CARD IS INVALID: xxxx

Explanation

The specified operand was not one of the valid dump control statement operands.

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System action

Control returns to AMDPRDMP or IPCS to terminate the exit.

System programmer response

Check the dump control statement operands.

DSNW008I THE SCOM CANNOT BE ACCESSED OR IT IS INVALID

Explanation

An error was encountered while trying to retrieve the SCOM.

System action

Control returns to AMDPRDMP or IPCS to terminate the exit.

System programmer response

If 'SUMDUMP=NO' was specified on the dump control statement, omit this operand, and resubmit the job. Otherwise, specify this operand on the dump control statement, and resubmit the job.

DSNW009I THE ADDRESS SPACE REQUESTED IS NOT AVAILABLE

Explanation

The Db2 control blocks for the address space specified on the 'SA=asid' dump operand could not be located.

System action

Formatting continues if other dump operands were specified.

System programmer response

Check the ASID specified on the 'SA=' dump operand. The ASID must be specified in hexadecimal.

DSNW010I THE TRACE RMFT CANNOT BE ACCESSED OR IT IS INVALID

Explanation

The Db2 trace table could not be located.

System action

Formatting of the Db2 trace table is bypassed, and formatting continues of any other requested dump segment.

System programmer response

If 'SUMDUMP=NO' was specified on the dump control statement, omit this operand. Otherwise, specify this operand on the dump control statement. In either case, resubmit the job.

DSNW011I A LARGER REGION SIZE IS REQUIRED FOR THIS JOB

Explanation

The subsystem formatting exit could not obtain a large enough work buffer to process the summary dump records.

System action

Subsystem formatting continues.

System programmer response

Rerun the job, specifying a larger region size in the JCL.

DSNW013I DMPW NOT FOUND IN SUMMARY DUMP

Explanation

The subsystem formatting exit was unable to locate the DMPW control block in the summary record portion of the dump data set. Because the DMPW provides the main anchor block for the dump formatter, processing is terminated.

System action

Control returns to AMDPRDMP or IPCS to terminate the exit.

System programmer response

If this is not a Db2 dump data set, specify 'SUBSYS=xxxx,SUMDUMP=NO' on the dump control statement (where xxxx is the 1- to 4-character subsystem name), so that the subsystem formatting exit does not attempt to use summary dump data.

DSNW014I REQUIRED SUMMARY DUMP RECORDS ARE NOT IN THIS DUMP. WILL ATTEMPT TO FORMAT FROM NON- SUMMARY DUMP

Explanation

Expected data could not be found in the summary dump. This message is issued for information only. Dump formatting continues. However, it will take longer, because a greater volume of data COMMAND PQUIT must be analyzed.

System action

Formatting is attempted using the full dump instead of the summary dump.

System programmer response

Though processing continues, this message is an indication of a problem, and should be pursued as such.

DSNW015I SSCVT NOT LOCATED. CHECK THE SUBSYSTEM NAME ON THE CONTROL CARD

Explanation

In a search through the SSCVT chain, a match of the subsystem name in the SSCVTs and the subsystem name on the control statement was not found.

System action

Formatting for the named subsystem is not done.

Operator response

Check the 'SUBSYS=' operand on the control statement.

System programmer response

Correctly specify the subsystem name on the control statement.

DSNW016I THE RMVT CANNOT BE ACCESSED OR IT IS INVALID

Explanation

The subsystem formatting exit could not locate the RMVT. The RMVT is required for formatting the Db2 trace table and a number of other Db2 control blocks.

System action

Formatting of the Db2 trace table is bypassed, and formatting of other requested dump segments continues.

System programmer response

If 'SUMDUMP=NO' was specified on the dump control statement, omit this operand. Otherwise, try specifying this operand on the dump control statement. In either case, resubmit the job.

DSNW017I MAXIMUM STACK LEVEL EXCEEDED

Explanation

This condition is usually caused by the Db2 control block formatter looping. The stack array is depleted and can no longer accommodate control blocks.

System action

Dump formatting is terminated.

System programmer response

Examine the control block chains to see if they are looping. If those chains are not looping, increase the dimension of the stack array.

DSNW018I SUBSYS= NOT SPECIFIED ON THE CONTROL CARD OR MISSING. REQUIRED IF SUMDUMP=NO SPECIFIED

Explanation

One of the following errors occurred:

- The 'SUMDUMP=NO' option was specified, but either the 'SUBSYS=' operand is missing, or it was incorrectly specified.
- A trace class was specified that would have resulted in an orphaned OP buffer. The trace class specified will not start, but the remainder of the classes are started.

System action

Dump formatting is terminated.

Operator response

Run the dump printing job after the error has been corrected.

DSNW020I UNSUCCESSFUL SEARCH FOR THE ERLY CONTROL BLOCK

Explanation

The 'ERLY' control block could not be located in the dump.

System action

Dump formatting is terminated.

Operator response

Check that the 'SUBSYS=' operand was correctly specified, and rerun the job.

System programmer response

This message can mean that the 'ERLY' control block has been overlaid. Examine the full dump to determine whether the subsystem is present. If it is, you may be able to determine why the control block could not be located.

DSNW022I THE RESIDENT TRACE WAS NOT ACTIVE AT THE TIME OF DUMP

Explanation

Trace table formatting has been attempted, but no trace table existed at the time of the dump.

System action

Dump formatting continues with any other control blocks that were to be formatted.

DSNW023I THE TRACE TABLE ENTRY IS OUT OF SEQUENCE OR OVERLAID

Explanation

A trace entry is overlaid by another trace entry of a different timestamp. This message is issued to flag an unrecognized trace entry. This can occur when the oldest entry in the table is the second half of a double entry.

System action

Formatting of the trace table continues.

DSNW024I TRACE TABLE

Explanation

The trace table follows.

System action

Trace table formatting follows.

DSNW025I DUMP ACCESS ERROR ACCESSING THE TRACE TABLE IN THE DUMP

Explanation

A nonzero return code was returned from the storage access routine when accessing the trace table.

System action

Trace table formatting is bypassed.

System programmer response

Check the address and ASID of the trace table.

DSNW026I CONTROL BLOCK SUMMARY (ALL ADDRESS SPACES)

DSNW027I CONTROL BLOCK SUMMARY (SINGLE ADDRESS SPACE)

DSNW028I CONTROL BLOCK SUMMARY (LONG FORM GLOBAL)

DSNW029I CONTROL BLOCK SUMMARY (SHORT FORM GLOBAL)

Explanation

Messages DSNW026I through DSNW029I provide descriptive information regarding the type of formatting being produced.

System action

Dump formatting continues.

DSNW030I DUMP ACCESS ERROR ACCESSING THE CONTROL BLOCK STRUCTURE TABLE IN THE DUMP

Explanation

The control block structure table cannot be accessed from the dump.

System action

Control block formatting is terminated.

Operator response

Notify the system programmer.

System programmer response

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

DSNW032I DUMP ACCESS ERROR ACCESSING ANCHOR CONTROL BLOCK

Explanation

The anchor control block cannot be accessed from the dump.

System action

Control block formatting is terminated.

Operator response

Notify the system programmer.

System programmer response

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

DSNW033I BEGINNING FORMATTING

Explanation

Formatting of Db2 control blocks is beginning.

DSNW034I TRACE TABLE AND GLOBAL BLOCKS ALREADY DUMPED

Explanation

An indicative dump is being requested. The Db2 trace table and the global blocks have already been dumped with first dump (full dump) for this abend dump (SNAP) invocation. These are, therefore, not dumped in the dump for this task.

DSNW035I WARNING - NO TASK RELATED CONTROL BLOCKS FOR THIS TASK

Explanation

The TCB for which the dump is being requested is not IDENTIFIED to Db2. Task-related control blocks are not dumped. The Db2 trace table and global blocks are dumped only if the 'SYSABEND' DD statement is present and only if this is the first of the dump(s) (full dump) for this abend dump (SNAP) invocation.

System action

No Db2 formatting is done for the specified task.

DSNW036I CONTROL BLOCKS FOR TASKS ASSOCIATED WITH THE ABOVE RECOVERY COORDINATOR TASK

Explanation

The formatted blocks following this message are associated with TCBs that have IDENTIFIED to Db2 with the 'recovery coordinator = no' option. These TCBs may not have invoked SNAP, but they are associated with the TCB that did.

System action

Related control blocks are dumped.

System programmer response

Examine the control blocks for relevant information.

DSNW037I TASK RELATED CONTROL BLOCKS FOR THIS TASK

Explanation

The formatted blocks following this message are associated with the TCB that is being dumped.

System action

Relevant control blocks are dumped.

System programmer response

Examine the control blocks for relevant information.

DSNW038I END OF FORMATTING

Explanation

Formatting of Db2 control blocks is completed.

DSNW039I SUBSYSTEM FORMATTING COMPLETE FOR THIS DUMP

Explanation

The subsystem formatting routine has completed its processing for this dump data set.

DSNW040I 'VVV'CONTROL BLOCK FORMATTER ERROR FLAGS

- X'80': FIELD EXPECTED TO BE ZERO IS NONZERO
- X'40': LAST BLOCK IN CHAIN DOES NOT POINT BACK TO PARENT BLOCK
- X'20': BLOCK NOT FOUND IN DUMP
- X'10': BLOCK LENGTH INCORRECT
- X'08': VERIFICATION CODE INCORRECT
- X'04': BLOCK CHAINED FROM THIS BLOCK NOT FOUND IN DUMP
- X'02': BLOCK CHAINED FROM THIS BLOCK HAS WRONG VERIFICATION CODE
- X'01': VALIDATION CONSTANT DOES NOT MATCH EXPECTED VALUE

Explanation

The message DSNW040I appears at the beginning of a formatted dump. It defines the hexadecimal values associated with the 'VVV=XX' keyword. This keyword is provided on the title line of each control block selected for formatting. It indicates any unusual conditions encountered during the validation and format processing of the current control block structure.

System action

Dump formatting continues.

System programmer response

All nonzero 'XX' values should be examined. If an error is indicated, the printout of the dump should be used for the problem documentation.

Problem determination

Possible errors include:

- X'80'
- X'40'
- X'20'
- X'04'

The current state of the individual control block structures at the time of error might vary with the type of error involved. Examine control block structures with one of these 'XX' values based on the specific ABEND code.

Example: A X'04' associated with the referencing control block and the X'20' associated with the referenced control block may mean the ABEND occurred between the release of the referenced control block and re-initialization of the address within the referencing one.

Db2 validation errors include:

- X'10'
- X'08'
- X'02'
- X'01'

These values indicate that a validation error occurred while formatting the associated control block.

For example, an X'08' associated with the referenced control block indicates the storage area has been overlaid or the address in the referencing control block is incorrect. Subsequent examination of the values in this control block is not reliable.

DSNW041I THE TAB CANNOT BE ACCESSED OR IT IS INVALID

Explanation

The Db2 trace table anchor block could not be located.

System action

Formatting of the Db2 trace table is bypassed, and formatting of any other requested dump segment continues.

System programmer response

If 'SUMDUMP=NO' was specified on the dump control statement, omit this operand. Otherwise, specify this operand on the dump control statement. In either case, resubmit the job.

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

DSNW049I OLDEST SLOT ADDRESS INVALID, FORMATTING TRACE TABLE FROM FIRST ENTRY

Explanation

The next trace table entry location is invalid.

System action

Dump formatting continues.

System programmer response

The printout of the dump should be used for the problem documentation.

Problem determination

The Trace Anchor Block has been initialized incorrectly, or overlaid during execution.

DSNW050I *ssid*,NO SDWA/LOGREC, ABND=*comp-reason*,U=*user-id*, M=*module*,C=XYR00.*vrm.comp-function*

Explanation

This message provides the default SVC dump title (SDUMP) associated with the SYS1.DUMP data set when an SDWA was unavailable during recovery processing. The variable fields are:

ssid
4-character Db2 subsystem name

comp-reason
Abend completion code, followed by the abend reason code.

user-id
Authorization-ID for the individual subsystem user.

module
Functional recovery routine responsible for the dump.

vrm.comp-function
Component-ID, as follows:

vrm
Db2 version, release number, and modification level.

comp-function
Component-ID function.

System action

Dump processing continues.

System programmer response

Since the SDWA provides important diagnostic information to assist in problem determination, examine the recovery environment at time of error to determine why an SDWA was not provided for this abend.

In a nonrecovery environment, there may be valid reasons for the lack of an SDWA.

Problem determination

In a recovery environment, functional recovery routines (FRRs) are guaranteed an SDWA by Recovery Termination Manager (RTM). Therefore, the recovery routine is most likely an ESTAE recovery routine. The primary reason for an SDWA not being provided to an ESTAE routine is insufficient storage available during recovery processing. Examine the region sizes allocated to the failing function to ensure that sufficient storage is available.

In a nonrecovery environment, no SDWA is provided because only RTM can create one.

DSNW051I ERROR DURING DUMP PROCESSING

Explanation

This message is generated by the 'SDUMP dump data gathering service' recovery routine when an error is encountered during dump processing.

System action

Processing of the 'SUMLSTA' user storage areas is terminated, an SVC dump is requested, and control is returned to RTM.

System programmer response

This error is documented in a SYS1.LOGREC record. This message can be issued because of an error in the invocation of SDUMP, or because of an error in SDUMP itself, or during control block examination and access.

DSNW052I ERROR ENCOUNTERED DURING LOAD OR VALIDATION OF A CONTROL BLOCK STRUCTURE TABLE MODULE

Explanation

The Db2 dump formatting facility cannot be used to format control blocks. An error occurred during the Db2 startup process while attempting to LOAD one of the Control Block Structures Table (CBDS) modules from the Db2 subsystem program library.

System action

Subsystem startup processing continues.

Operator response

If intervention is needed, notify the system programmer.

System programmer response

If intervention is desired, the Db2 subsystem can be terminated by either an MVS CANCEL command or a -STOP DB2 command. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Problem determination

The modules must reside in a Db2 program library named on the execution procedure used to start a Db2 subsystem address space.

The named modules prohibit the use of the Db2 dump formatting facility to format SVC dumps that occur during the current execution cycle of the Db2 subsystem. The named modules are not required for Db2 execution.

DSNW053I VRA DIAGNOSTIC INFORMATION REPORT

Explanation

All Db2 diagnostic information in the Variable Recording Area (VRA) at the time of the error is extracted and displayed in this report.

The address of the SDWA, the contents of SDWARA, and SDWARA's hexadecimal offset into SDWA are also

displayed. Individual diagnostic entries are identified by a hexadecimal VRA 'key', followed by the length of the subsequent data. Data fields are displayed in hexadecimal and EBCDIC formats. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

System action

Dump format processing continues.

System programmer response

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

DSNW054I NO VRA DATA RECORDED IN SDWA

Explanation

The SDWA obtained from the SYS1.DUMP data set contained no diagnostic information in the VRA.

System action

VRA report generation is bypassed, dump format processing continues.

System programmer response

If an error is indicated, the printout of the dump should be used for the problem documentation. If VRA data is needed, the abending Db2 subcomponent has failed to supply it. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

DSNW055I FORMAT ROUTINE UNABLE TO LOCATE SDWA

Explanation

The MVS Summary Dump Data Access Service Routine (IEAVTFRD) was unable to locate the SDWA in the summary data portion of the SYS1.DUMP data set.

System action

VRA report generation is terminated and dump format processing continues.

System programmer response

Take the appropriate action, as indicated in the next section. If an error is indicated, use the printout of the dump for problem documentation.

Problem determination

The SDWA is placed in the summary data portion of the SYS1.DUMP data set by AMDPRDMP or IPCS. It indicates either CSA or Local Storage Residency.

If the SDWA is not in the dump data set, no error is indicated.

DSNW056I VRA DIAGNOSTIC REPORT COMPLETE

Explanation

The VRA Diagnostic Report is done.

System action

Dump format processing continues.

DSNW060I BEGIN SAVE AREA TRACE

Explanation

This message identifies the start of the Db2 register Save Area Trace report which appears in the formatted section of a Db2 SVC Dump. The save areas for the current failing agent execution block (EB), and all associated Agent EBs, are traced from the point of error and displayed in order of invocation.

The format of this report is as follows:

Save Area Identification

The address and contents of each save area is displayed and identified by the invoking module.

```
Module-name  Service-level-identifier

SA    .... WD1 ....  HSA ....  LSA ....
RET ....  EPA ....  R0  ....
R1  ....  R2  ....  R3  ....
R4  ....  R5  ....  R6  ....
R7  ....  R8  ....  R9  ....
R10 ....  R11 ....  R12 ....
```

Module-name

Identifies the module responsible for obtaining the save area as indicated in the Db2 module entry point list (MEPL) at the time of the error.

If the MEPL does not contain an entry that corresponds to the module entry point address (EPA), this field is set to:

MODULE INFORMATION UNAVAILABLE

Service-level-identifier
The service level information associated with the module name is obtained from the corresponding module MEPL entry, and consists of the compilation-date and the PTF number of the latest maintenance applied.

If no maintenance has been applied for this module, this field defaults to the Function Modification Identifier (FMID).

SA
Identifies the address and contents of each word of the save area and is displayed using the format and register abbreviation conventions defined by MVS SNAP. All save area data references indicate the primary address space at the time of execution.

Execution Environment

Displays the current execution environment at the time of error for the save areas that follow. This information is repeated each time the current Agent execution EB changed during processing.

```
CURRENT EB=address JOBNAME=name
HASID=hasid PASID=pasid
EXECUTION MODE=mode
```

address
Address of the associated Agent EB.

name
The 8-character MVS jobname associated with the home address space.

hasid
Home address space identifier.

pasid
Primary address space identifier.

mode
Agent EB MVS execution mode:

TCB
Task Control Mode

SRB
Supervisory Request Mode

Register Save Area Contents for Agent EBs

The contents of the register save area chains for the current failing Agent EB, and all suspended Agent EBs at the time of error, are displayed using the save area (SA) format.

```
REGISTERS IN (CB-name) AT TIME OF
execution-status
```

CB-name
Identifies the name of the control block from which the registers for the current Agent EB were obtained:

SDWA
MVS System Diagnostic Workarea (Failure).

TCB
MVS Task Control Block (Suspend).

STSV
MVS SRB Status Save Area (Suspend).

execution-status
Indicates the current execution status of the Agent EB at the time of error:

Failure
Failing execution EB.

Suspend
Suspended execution EB.

Change of Primary Address Space

Since all register data references refer to the primary address space associated with the currently active execution EB, the following information is displayed each time the primary address changed during execution:

```
CHANGE OF ADDRESS SPACE, NEW PASID=pasid
```

pasid
Indicates the new primary address space identifier associated with the save areas that follow.

System action

save area trace format processing continues for the failing agent EB, and all associated agent EBs.

System programmer response

See the Problem Determination section.

Problem determination

This report may be used to determine the register contents, module invocation sequence, and execution environments leading up to the point of error.

DSNW061I SAVE AREA TRACE COMPLETE

Explanation

This message indicates that the Db2 formatted save area trace report (DSNW060I) is complete.

System action

Dump format processing continues.

DSNW062I R6 (R6-contents) DOES NOT CONTAIN A VALID EB ADDRESS

Explanation

During dump format processing of the Db2 formatted Save Area Trace report (DSNW060I), register 6 (R6) did not contain the address of a valid Agent execution block (EB).

R6-contents:
The contents of register 6.

System action

save area trace format processing is terminated for the current Agent EB, and all prior EBs.

System programmer response

The dump formatter expects the contents of register 6 to contain the address of a valid EB.

Problem determination

Register 6 does not contain the current EB address or a prior EB address.

Refer to the abend reason and completion codes associated with the original error to determine the use of register 6 prior to the failure.

DSNW063I name (address) ASID (asid) NOT FOUND IN DUMP

Explanation

During dump formatter processing of the save area trace report (DSNW060I), a control block or save area was not found in the dump data set.

Since the dump formatter uses the Db2 and MVS control blocks defined under the 'name' field of this message to locate individual register save areas, subsequent save areas located via the 'named' control block or save area will not be displayed in the report.

name
Identifies the name of the control block or save area that was not found in the dump data set:

SA
Indicates a Save Area

ASCE
Db2 Address Space Control Element

EB
Db2 Execution Block

TCB
MVS Task Control Block

RB
MVS Request Block

XSB
MVS Extended Status Block

PSA
MVS Prefix Save Area

SDWA
MVS System Diagnostic Work Area

STSV
MVS SRB Status Save Area

STKE
MVS Cross Memory Stack Element

address
The address of the 'named' control block or save area.

asid
The address space identifier associated with the control block or save area.

System action

Register save area trace format processing for the current save area chains is terminated. Subsequent save area processing will vary depending on the specific control block or save area that was available, and the Db2 Agent execution environments at the time of the error.

System programmer response

Due to the execution structures and environmental restrictions of selected Db2 and MVS control structures, some control blocks and save areas associated with these execution environments will not be included in the dump data set.

Problem determination

During MVS/RTM recovery processing, IFC Dump Services attempts to include all control blocks (both Db2 and MVS), and the pertinent Db2 save areas in the dump data set, regardless of the type of error. Control blocks and save areas associated with the following address spaces at time of error will be included in the dump data set:

- Primary, Secondary, and Home address spaces.
- Db2 System Services and Database Services address spaces.

DSNW108I UNABLE TO AUTOMATICALLY START *type* TRACE

Explanation

System parameters indicated that a Db2 trace should be started automatically during Db2 subsystem initialization, but the Db2 subsystem was unable to start the trace. A nonzero return code was received from the -START TRACE command.

System action

Subsystem initialization continues.

Operator response

Start the trace via the -START TRACE command after Db2 subsystem initialization is complete.

DSNW109I TRACE INITIALIZATION PARAMETERS UNAVAILABLE, DEFAULTS ASSUMED

Explanation

The trace function was unable to access the trace initialization parameters defined by the DSN6SYSP macro. Default values as defined by that macro are assumed for trace parameters.

System action

Subsystem initialization continues.

Operator response

Determine if the system parameters module DSNZPARM is missing or inaccessible. If not, determine if the CSECT DSN6SYSP is missing. Trace can be started with the -START TRACE command.

DSNW120I A SPECIFIED *keyword* VALUE IS INVALID FOR *trace-type* TRACE

Explanation

A trace command has been entered, but a specified keyword value is not valid for the trace type requested.

System action

Processing for the TRACE command is terminated.

Operator response

If a -START TRACE command was entered, specify a valid destination for the trace. Otherwise, issue a -DISPLAY TRACE command to determine what traces are currently active.

Problem determination

Obtain a copy of the system or terminal log to verify command entry.

Related concepts

Types of Db2 traces (Db2 Performance)

Related reference

-START TRACE (Db2) (Db2 Commands)

-DISPLAY TRACE (Db2) (Db2 Commands)

DSNW121I A SPECIFIED CLASS VALUE IS INVALID FOR *trace-type* TRACE

Explanation

A trace command has been entered, but a specified class value is not valid for the trace type requested.

System action

Processing for the TRACE command is terminated.

Operator response

If a -START TRACE command was entered, specify a valid class for the trace. Otherwise, issue a -DISPLAY TRACE command to determine what options are currently active.

Problem determination

Obtain a copy of the system or terminal log to verify command entry.

Related concepts

Types of Db2 traces (Db2 Performance)

Related reference

-START TRACE (Db2) (Db2 Commands)

-DISPLAY TRACE (Db2) (Db2 Commands)

DSNW122I THE KEYWORD *invalid-keyword* IS NOT VALID FOR *trace-type* TRACE

Explanation

A trace command has been entered, but *invalid-keyword* is not valid for the trace type specified.

System action

Processing for the trace command is terminated.

Operator response

Omit the specified keyword from the trace command, or specify a different type of trace.

Problem determination

Obtain a copy of the system or terminal log to verify command entry.

Related concepts

Types of Db2 traces (Db2 Performance)

Related reference

-START TRACE (Db2) (Db2 Commands)

-MODIFY TRACE (Db2) (Db2 Commands)

DSNW123I ***csect-name*** **TRACE RECORDING HAS BEEN RESUMED ON** ***dest***

Explanation

'dest' destination resumes acceptance of trace data after a failure.

System action

Data recording is resumed.

DSNW124I ***csect-name type*** **TRACE TERMINATED RC=***code* **RMID=***nn*

Explanation

During processing 'type' trace, processing abended due to an error. A trace type of blank indicates all tracing has stopped. 'RMID', displayed in decimal, identifies the resource manager. 'RC', displayed in hexadecimal, specifies the return/reason/abend code associated with the action.

Further collection of the named trace is stopped. If it is necessary to resume collection of the trace, a -START TRACE command may be issued. However if another failure is experienced, the problem should be resolved before starting the trace collection again.

System action

Processing for the named trace type is stopped. The message is not externalized by the functional recovery routine, but is outputted whenever a IFC event is driven at a later time. A trace type of blank indicates all tracing has stopped.

Operator response

If necessary to collect the named trace, issue a -START TRACE command to resume processing.

User response

Investigate the reasons for the failure.

Problem determination

Obtain a copy of the system or terminal log. If a dump was produced, have it printed. Print a copy of the contents of the SYS1.LOGREC for the time period involved. Forward these items along with a copy of the system log to the system programmer.

DSNW125I **MULTIPLE ENTRIES NOT ALLOWED FOR** ***constraint-option*** **AND** ***constraint-option***

Explanation

A trace command contained multiple values for the indicated options. When used separately, both options permit multiple values. However, when two or more constraint options are used together, only one can contain multiple values.

constraint-option
The name of the constraint option. Message DSNW125I identifies the first two constraint options that contain multiple values. The command might contain additional constraint options that contain multiple values, but they are not listed.

System action

Command processing is terminated.

Operator response

Rewrite the command so that only one of the constraint options specifies multiple values.

For example, the following command would cause message DSNW125I:

Incorrect command:

```
START TRACE ACCTG PLAN(a,b,c) AUTHID (d,e)
```

Instead, issue two commands, where each command contains a different user ID:

Correct commands:

```
START TRACE ACCTG PLAN(a,b,c) AUTHID (d)
START TRACE ACCTG PLAN(a,b,c) AUTHID (e)
```

In some cases, it might be more efficient to use the corresponding filtering option instead of the constraint option. Filtering options with multiple values can be used in conjunction with a constraint option that has multiple values. Referring to the preceding example, you could issue this command, where the command uses XAUTHID to enumerate all users other than *d* and *e*:

Correct command:

```
START TRACE ACCTG PLAN(a,b,c) XAUTHID (f,g)
```

Make sure that no other constraint options in the command contain multiple values.

Problem determination

If the cause of message DSNW125I is not immediately obvious, obtain a copy of the system or terminal log to verify the command entry.

Related reference

-START TRACE (Db2) (Db2 Commands)
-DISPLAY TRACE (Db2) (Db2 Commands)
-MODIFY TRACE (Db2) (Db2 Commands)
-STOP TRACE (Db2) (Db2 Commands)

DSNW126I *type* TRACE NOT ALLOWED, ACTIVE TRACE TABLE FULL

Explanation

The 'type' trace cannot be started because the active trace table is has reached the maximum number of active traces allowed.

System action

Processing for the TRACE command is terminated.

Operator response

Use the -DISPLAY TRACE command to see if an active trace could be stopped. An active trace must be stopped before any other start trace command will be processed.

Problem determination

Obtain a copy of the system or terminal log to verify command entry.

DSNW127I CURRENT TRACE ACTIVITY IS-

Explanation

This message displays output from the DISPLAY TRACE command. The format of the output depends on the value of the DETAIL option that was specified on the command.

If you specify DETAIL(1), DETAIL (1,2) or DETAIL(*) or do not specify the DETAIL option, the DISPLAY TRACE output includes the following summary information. The line that begins with *trace-number* is displayed once for each qualifying trace.

```
DSNW127I  CURRENT TRACE ACTIVITY IS
-
TNO           TYPE        CLASS
DEST         QUAL      IFCID
trace-number  trace-type  type-class
destination  qualified ifcid
trace-number  trace-type  type-class
destination  qualified ifcid
*********END OF DISPLAY TRACE SUMMARY
DATA*********
```

If you specify DETAIL(2), DETAIL (1,2) or DETAIL(*), the DISPLAY TRACE output includes the following qualification and audit policy information. This example output shows all of the possible qualifications that can be displayed. However, in your output, only the qualifications for the specified trace are displayed. For example, if the trace does not have a plan qualification, the line with PLAN is not displayed.

Qualifications that exceed 70 characters are continued on the following line.

```
DSNW143I  CURRENT TRACE QUALIFICATIONS ARE -
DSNW152I  BEGIN TNO trace-number
QUALIFICATIONS
NO QUALIFICATIONS
END TNO trace-number QUALIFICATIONS
DSNW185I BEGIN TNO trace-number AUDIT POLICIES
NO AUDIT POLICIES ACTIVE
END TNO trace-number AUDIT POLICIES

DSNW152I  BEGIN TNO trace-number
QUALIFICATIONS
PLAN: plan-qualification
AUTHID: authid-qualification
LOCATION: location-qualification
USERID: userid-qualification
APPLICATION/TRANSACTION NAME: application/
transaction-name-qualification
WORKSTATION: workstation-qualification
PACKAGE LOCATION: package-location-qualification
PACKAGE COLLECTION ID: package-collection-ID-
qualification
PACKAGE PROGRAM NAME: package-program-name-
qualification
ROLE: role-qualification
RMID: rmid-qualifications
CONNECTION ID: connection-ID-qualification
CORRELATION ID: correlation-ID-qualification
EXCLUDE PLAN: xplan qual1,xplan qual2,...,xplan
qual8
EXCLUDE AUTHID: xauthid qual1,xauthid
qual2,...,authid qual8
EXCLUDE LOCATION: xloc qual1,xloc
qual2,...,xloc qual8
EXCLUDE USERID: xuserid qual1,xuserid
qual2,...,xuserid qual8
EXCLUDE APP/TXACT NAME: xappname qual1,xappname
qual2,...,xappname qual8
EXCLUDE WORKSTATION: xwrkstn qual1,xwrkstn
qual2,...,xwrkstn qual8
EXCLUDE PACKAGE LOC: xpkgloc qual1,xpkgloc
qual2,...,xpkgloc qual8
EXCLUDE PACKAGE COLLID: xpkgcol qual1,xpkgcol
qual2,...,xpkgcol qual8
EXCLUDE PACKAGE PROGNAME: xpkgprog
qual1,xpkgprog qual2,...,xpkgprog qual8
EXCLUDE CONNECTION ID: xconnid qual1,xconnid
qual2,...,xconnid qual8
EXCLUDE CORRELATION ID: xcorrid qual1,xcorrid
qual2,...,xcorrid qual8
EXCLUDE ROLE: xrole qual1,xrole qual2,...,xrole
qual8
END TNO trace-number QUALIFICATIONS
DSNW185I BEGIN TNO trace-number AUDIT POLICIES
AUDIT POLICY: policy-name
END TNO trace-number AUDIT POLICIES

DSNW148I  ******END OF DISPLAY TRACE
QUALIFICATION
```

If the DISPLAY TRACE output is on an MVS console and must be continued, the following message is displayed:

```
DSNW198I DISPLAY TRACE OUTPUT TO BE CONTINUED
(CMDID=command-id)
```

To find the continued output, look for the DSNW199I message that has the same CMDID value.

```
DSNW199I DISPLAY TRACE OUTPUT CONTINUED
(CMDID=command-id)
```

The output ends with message DSN9022I:

```
DSN9022I  '-DISPLAY TRACE' NORMAL COMPLETION
```

trace-number
The trace number that is active.

trace-type
The type of trace, which can be one of the following values:

PERFM
Performance trace.

ACCTG
Accounting trace.

STAT
Statistics trace.

AUDIT
Accounting trace.

If no class is specified, the audit policy is used. Message DSNW185I provides more information about the audit policy.

MONITOR
Monitor trace.

Related information:

Types of Db2 traces (Db2 Performance)

type-class
Within the trace type, the class of the trace.

destination
The destination that is specified for the trace entries.

qualified
An indication of whether the trace is qualified.

YES
The trace is qualified by authorization ID, plan, resource manager identifier (RMID), or location.

NO
The trace is not qualified.

To display qualification information, specify DETAIL(2) on the DISPLAY TRACE command.

Message DSNW143I provides trace qualification information.

ifcid
The IFCIDs that were specified with the IFCID keyword.

NO QUALIFICATIONS
The specified trace has no trace qualifications.

plan-qualification
One or more application plan names. Only threads that are associated with these plans are being monitored by the specified trace. This value corresponds to the PLAN constraint option in the START TRACE command.

authid-qualification
One or more authorization IDs. Only threads that are associated with these authorization IDs are being monitored by the specified trace. This value corresponds to the AUTHID constraint option in the START TRACE command.

location-qualification
One or more location names. Only threads that are associated with these locations are being monitored by the specified trace. This value corresponds to the LOCATION constraint option in the START TRACE command.

userid-qualification
One or more user IDs. Only threads that are associated with these user IDs are being monitored by the specified trace. This value corresponds to the USERID constraint option in the START TRACE command.

application/transaction-name-qualification
One or more application names. Only threads that are associated with these applications are being monitored by the specified trace. This value corresponds to the APPNAME constraint option in the START TRACE command.

workstation-qualification
One or more workstation names. Only threads that are associated with these workstations are being monitored by the specified trace. This value corresponds to the WRKSTN constraint option in the START TRACE command.

package-location-qualification
One or more location names where the package is bound. Only threads that are associated with these locations are being monitored by the specified trace. This value corresponds to the PKGLOC constraint option in the START TRACE command.

package-collection-ID-qualification
One or more package collection names. Only threads that are associated with these package collections are being monitored by the specified trace. This value corresponds to the PKGCOL constraint option in the START TRACE command.

package-program-name-qualification
One or more DBRMs or program names. Only threads that are associated with these DBRMs or programs are being monitored by the specified

trace. This value corresponds to the PKGPROG constraint option in the START TRACE command.

role-qualification
One or more connection roles. Only threads that are associated with these roles are being monitored by the specified trace. This value corresponds to the ROLE constraint option in the START TRACE command.

rmid-qualifications
One or more resource manager identifiers (RMIDs). Only threads that are associated with these RMIDs are being monitored by the specified trace. This value corresponds to the RMID constraint option in the START TRACE command.

connection-ID-qualification
One or more connection IDs. Only threads that are associated with these connection IDs are being monitored by the specified trace. This value corresponds to the CONNID constraint option in the START TRACE command.

correlation-ID-qualification
One or more correlation IDs. Only threads that are associated with these correlation IDs are being monitored by the specified trace. This value corresponds to the CORRID constraint option in the START TRACE command.

xplan qual1,xplan qual2,...,xplan qual8
One or more application plan names that are excluded from the specified trace. The trace is not monitoring any threads that are associated with these plans. This value corresponds to the XPLAN filtering option in the START TRACE command.

xauthid qual1,xauthid qual2,...,authid qual8
One or more authorization IDs that are excluded from the specified trace. The trace is not monitoring any threads that are associated with these authorization IDs. This value corresponds to the XAUTHID filtering option in the START TRACE command.

xloc qual1,xloc qual2,...,xloc qual8
One or more location names that are excluded from the specified trace. The trace is not monitoring any threads that are associated with these locations. This value corresponds to the XLOC filtering option in the START TRACE command.

xuserid qual1,xuserid qual2,...,xuserid qual8
One or more user IDs that are excluded from the specified trace. The trace is not monitoring any threads that are associated with these user IDs. This value corresponds to the XUSERID filtering option in the START TRACE command.

xappname qual1,xappname qual2,...,xappname qual8
One or more application names that are excluded from the specified trace. The trace is not monitoring any threads that are associated with these applications. This value corresponds to the XAPPNAME filtering option in the START TRACE command.

xwrkstn qual1,xwrkstn qual2,...,xwrkstn qual8
One or more workstation names that are excluded from the specified trace. The trace is not monitoring any threads that are associated with these workstations. This value corresponds to the XWRKSTN filtering option in the START TRACE command.

xpkgloc qual1,xpkgloc qual2,...,xpkgloc qual8
One or more location names where the package is bound. These locations are excluded from the specified trace. The trace is not monitoring any threads that are associated with these locations. This value corresponds to the XPKGLOC filtering option in the START TRACE command.

xpkgcol qual1,xpkgcol qual2,...,xpkgcol qual8
One or more package collection names that are excluded from the specified trace. The trace is not monitoring any threads that are associated with these package collections. This value corresponds to the XPKGCOL filtering option in the START TRACE command.

xpkgprog qual1,xpkgprog qual2,...,xpkgprog qual8
One or more DBRMs or program names that are excluded from the specified trace. The trace is not monitoring any threads that are associated with these DBRMs or programs. This value corresponds to the XPKGPROG filtering option in the START TRACE command.

xconnid qual1,xconnid qual2,...,xconnid qual8
One or more connection IDs that are excluded from the specified trace. The trace is not monitoring any threads that are associated with these connection IDs. This value corresponds to the XCONNID filtering option in the START TRACE command.

xcorrid qual1,xcorrid qual2,...,xcorrid qual8
One or more correlation IDs that are excluded from the specified trace. The trace is not monitoring any threads that are associated with these correlation IDs. This value corresponds to the XCORRID filtering option in the START TRACE command.

xrole qual1,xrole qual2,...,xrole qual8
One or more connection roles that are excluded from the specified trace. The trace is not monitoring any threads that are associated with

these roles. This value corresponds to the XROLE filtering option in the START TRACE command.

policy-name
The name of the audit policy that is active for the specified trace. If the trace does not have a policy name, this line is not displayed.

NO AUDIT POLICIES ACTIVE
The specified trace has no active audit policies.

command-id
The identifier for the command.

System action

Processing continues.

User response

No action is required.

Related reference
-DISPLAY TRACE (Db2) (Db2 Commands)
-START TRACE (Db2) (Db2 Commands)

DSNW130I ***type*** **TRACE STARTED, ASSIGNED TRACE NUMBER** ***tno***

Explanation

'type' trace has been started and assigned the decimal trace number 'tno'. Multiple messages are possible when the start request specifies multiple plans or multiple authorization ids.

System action

Processing for the -START TRACE command will continue.

DSNW131I **STOP TRACE SUCCESSFUL FOR TRACE NUMBER(S)** ***tno,...***

Explanation

The trace number(s), 'tno,...', have been stopped. Up to five decimal trace numbers may be listed. If more than five traces have been stopped, then another DSNW131I message is sent.

System action

Processing for the -STOP TRACE command will continue.

DSNW132I **MODIFY TRACE SUCCESSFUL FOR TRACE NUMBER(S) tno,...**

Explanation

The trace numbers, 'tno,...', have been modified. Up to five numbers may be listed. If more than five traces have been modified, then another DSNW131I message is sent.

System action

Processing for the modify command will continue.

DSNW133I ***csect-name*** **TRACE DATA LOST,** ***destination*** **NOT ACCESSIBLE RC=***return-code*

Explanation

The specified destination stopped accepting trace data during a trace. A condition external to Db2 caused the data to be rejected.

This message is also issued if a START TRACE command is entered from the console or from the DB2I commands panel to an unassigned OP*n* or OPX destination. The reason is because the OP destination is not activated until an application program claims the buffer. Db2 begins writing trace records to the buffer when an application program issues START TRACE to this same OP buffer destination.

csect-name
The name of the control section that issued the message.

destination
The location to which the trace data is sent. *destination* can be one of the following values:

RES
Resident trace table

GTF
z/OS generalized trace facility

OP*n*
Destination for trace output

SMF
System management facility

SRV
Serviceability routine

return-code
The reason for the failure. Depending on the *destination* value, *return-code* contains one of the following values:

GTF
The hexadecimal return code from the GTF request.

04
The GTF trace, USR tracing, or both are not active.

OP*n*
The hexadecimal return code from the OP*n* request or OPX request.

04
No OP*n* buffer is assigned to an application to collect data.

08
The OP*n* buffer to which the records were to be written is full. All subsequent records that are intended for the buffer are lost.

SMF
The hexadecimal return code from SMF. See Return codes (z/OS MVS System Management Facilities).

SRV
The hexadecimal return code from the SRV request.

10
The serviceability routine is absent.

xx
The serviceability routine return code.

System action

Trace processing continues. However, data is lost.

Operator response

You can use the START TRACE command to record the data at another destination. You can also use the DISPLAY TRACE command to show what types of data were recorded at the specified destination.

For GTF or SMF errors, investigate the facility to determine why data is not being accepted.

For OPX errors with a *return-code* value of 8, take one or more of the following actions:

- Increase the size of the OP*n* buffer.
- Issue the IFI READA request more frequently so that the OPx buffer is read and the content is cleared before buffer storage is exhausted.

Problem determination

Obtain a copy of the system or terminal log to verify the command.

Related concepts
The Generalized Trace Facility (GTF) (MVS Diagnosis: Tools and Service Aids)
Related reference
-START TRACE (Db2) (Db2 Commands)
-DISPLAY TRACE (Db2) (Db2 Commands)
IFI functions (Db2 Performance)

DSNW135I *type* TRACE ALREADY ACTIVE, TRACE NUMBER *tno*

Explanation

'type' trace was already active with trace number 'tno'.

System action

Processing for the -START TRACE command will continue.

DSNW137I SPECIFIED TRACE NOT ACTIVE

Explanation

The trace that was specified on the STOP TRACE command or the DISPLAY TRACE command was not found in the active trace table.

System action

Command processing continues.

Operator response

Consider issuing an unqualified DISPLAY TRACE command to determine all of the active trace entries. If no traces are active, Db2 returns this message (DSNW137I) again.

Related reference
-DISPLAY TRACE (Db2) (Db2 Commands)
-STOP TRACE (Db2) (Db2 Commands)

DSNW138I IFCID *ifcid-number* IS INVALID

Explanation

The specified IFCID number is outside the range of valid IFCID numbers or is an IFCID number which is not allowed on a trace command.

System action

Processing of the trace command is terminated before any trace functions are performed.

Operator response

Investigate the reason for the problem.

Problem determination

Remove any non-valid IFCID values and reissue the command.

Related concepts
Db2 trace (Db2 Performance)

Related reference

-START TRACE (Db2) (Db2 Commands)
-MODIFY TRACE (Db2) (Db2 Commands)
Trace field descriptions (Db2 Performance)

DSNW139I AUTHORIZATION FAILURE BECAUSE *privilege-name* PRIVILEGE REQUIRED FOR TRACE NUMBER(S) *trace-number*

Explanation

The user of the command does not have the required authorization privilege to execute the command that was specified for the *trace-number* trace entries. Up to five trace numbers can appear in a single message. Multiple messages might be issued when the required authorization privilege is missing for multiple trace numbers.

privilege-name
The name of the privilege.

trace-number
The trace number that requires an authorization privilege.

System action

Command processing is stopped.

Operator response

Notify the security administrator.

User response

Notify the security administrator.

Problem determination

Obtain a copy of the command input and verify the user's current authorization from the Db2 subsystem catalog.

DSNW140I ALL OPN DESTINATIONS ARE ASSIGNED

Explanation

The request could not be processed because destinations OP1 - OP8 were assigned.

System action

Processing of the trace command is terminated before any trace functions are performed.

Operator response

Investigate the reason for the problem by doing a display trace to analyze the active traces.

User response

Investigate the reason for the failure.

Problem determination

Analyze why all the OPn destinations are active after doing a display trace.

DSNW141I STORAGE NOT AVAILABLE FOR BUFFER SIZE *size* K BYTES

Explanation

The request could not be processed because storage cannot be obtained for the OPn destination storage buffer.

System action

Processing of the trace command is terminated.

Operator response

Investigate the reason for the problem by doing a display trace to analyze the active traces.

User response

Investigate the reason for the failure.

Problem determination

The problem is caused either because one or more prior start traces to an OPn destination used all the storage in the IFC OPn storage pool or because ECSA contiguous storage was not available. The IFC OPn storage pool limit is approximately 4 megabytes. When a trace is stopped the buffer storage is not free. If another start trace is issued to the same destination, the storage will be reused. If the requested storage is greater than the current unassigned buffer, it is free and a larger buffer is obtained. If the requested storage is less than the current unassigned buffer, the buffer is reused. Fragmentation can occur if either application programs or an operator specify numerous start commands for varying size buffers.

DSNW142I SPECIFIED BUFSIZE IS INCOMPATIBLE WITH ASSIGNED BUFFER

Explanation

The request could not be processed because the start trace command specified a BUFSIZE value for an OPn

destination which has a buffer already assigned with a different BUFSIZE.

System action

Processing of the trace command is terminated.

Operator response

Investigate the reason for the problem.

User response

Investigate the reason for the failure.

Problem determination

The problem may be caused by one application program attempting to start a trace to a destination owned by another program. This is a site problem and can be solved by having application programs start traces to an OPX destination rather than a specific OPn destination. If only one application program is starting traces, then the program should either specify the same BUFSIZE for all requests or should not specify BUFSIZE.

DSNW143I CURRENT TRACE QUALIFICATIONS ARE -

Explanation

This message is part of the output from the DISPLAY TRACE command, which is described in message "DSNW127I" on page 1003.

DSNW148I ***END OF DISPLAY TRACE QUALIFICATION DATA**

Explanation

This message is part of the output from the DISPLAY TRACE command, which is described in message "DSNW127I" on page 1003.

DSNW149I STOP TRACE COMMAND WAS UNSUCCESSFUL BECAUSE MONITOR TRACE CLASS 6 IS ACTIVE FOR QUALIFYING TRACE NUMBER(S) *class-number*,...

Explanation

No traces were stopped by the -STOP TRACE command. Either -STOP TRACE(*) or -STOP TRACE(MON) CLASS(*) was issued when monitor trace class 6 was active. An asterisk (*) is not allowed for the TRACE and CLASS keywords when monitor trace class 6 is active. The trace numbers, *class-number*, indicate the traces that met any other specified -STOP TRACE qualifying criteria (PLAN, AUTHID, RMID, LOCATION, TNO) and also activated monitor trace class 6, thereby preventing all qualifying traces from being stopped. This special handling of the asterisk on the -STOP TRACE command for monitor trace class 6 reduces the possibility of accidentally stopping monitor trace class 6, which enables and disables Db2 data propagation.

System action

No traces are stopped. Processing of the -STOP TRACE command is terminated.

Operator response

If you do not want Db2 data propagation capability, you can stop monitor trace class 6 to allow full use of the asterisk. First stop the traces indicated by the trace numbers, *class-number*, and then reissue the command.

If you want Db2 data propagation capability, do not stop monitor trace class 6. You must specify the trace TYPE. You can stop traces without specifying the trace CLASS as long as the trace TYPE is not (MON). If the trace TYPE is (MON), then you must specify the CLASS keyword explicitly (for example, -STOP TRACE(MON) CLASS(1,2)).

User response

Reissue the -STOP TRACE command without using an asterisk for the trace type. You can use a asterisk for the CLASS keyword to stop all trace types except the monitor (MON) trace.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

Related concepts

Monitor trace (Db2 Performance)

Related reference

-STOP TRACE (Db2) (Db2 Commands)

DSNW150I EXCLUDE FOR ALL *keyword* VALUES IS NOT ALLOWED

Explanation

You have entered a start trace command with an invalid value for the X*keyword* keyword.

System action

Processing the -START TRACE command is terminated.

Operator response

Enter valid values for the X*keyword* keyword on a -START TRACE command. Refer to the Db2 Command Reference for details about valid X*keyword* keyword values.

DSNW151I **ERROR CONVERTING *keyword* VALUE TO UTF-8**

Explanation

One of the following commands failed, because a value could not be converted to UTF-8:

- START TRACE
- STOP TRACE
- DISPLAY TRACE

keyword
The keyword in the START TRACE, STOP TRACE, or DISPLAY TRACE command that is causing the problem. The value of this keyword could not be converted to UTF-8.

System action

Command processing terminates.

Operator response

Reenter the command. If the failure persists, contact IBM Support.

DSNW152I **BEGIN TNO *trace-number* QUALIFICATIONS**

Explanation

This message is part of the output from the DISPLAY TRACE command, which is described in message "DSNW127I" on page 1003.

DSNW169I **THE MAXIMUM OF 16 TRACE QUALIFICATIONS FOR A TRACE HAS BEEN EXCEEDED.**

Explanation

A START, STOP, OR DISPLAY trace command has been entered that would result in greater than 16 qualifications for a trace entry.

System action

Processing of the command is terminated.

Operator response

Reduce the number of trace qualifications specified. Refer to the Db2 Command Reference for details about trace qualifications.

DSNW182I ***csect* AN INTERNAL STOP HAS BEEN ISSUED FOR TRACE NUMBER *traceno* BECAUSE THE OP BUFFER OWNER HAS TERMINATED**

Explanation

This message is issued when the thread that owns the OP buffer terminates. Db2 has stopped the trace that you specified because the trace was started with exclusively OP buffer destinations. OP buffer destinations require a valid owning thread. Db2 may also issue an internal stop for traces started with a combination of OP and non-OP destinations. This occurs when an internal modify results in a duplicate trace entry.

DSNW183I ***csect* AN INTERNAL MODIFY HAS BEEN ISSUED FOR TRACE NUMBER *traceno* BECAUSE THE OP BUFFER OWNER HAS TERMINATED. TRACE NUMBER *traceno* REMAINS ACTIVE USING DESTINATIONS *dest1, dest2, ...***

Explanation

This message is issued when the thread that owns the OP buffer terminates. The trace *traceno* remains active using only the destinations specified. OP buffer destinations have been stopped because these destinations require a valid owning thread.

DSNW184I ***csect* OP BUFFER *opbuff* NOT AVAILABLE**

Explanation

This message is issued when a -START TRACE command has DEST(OP1-8) specified. The thread issuing the -START TRACE command does not currently own an in use buffer *opbuff* or the values in IFCAOWNER, IFCAGLBL, and WBUFECB do not match the values that are specified by previously started traces.

System action

Processing for the -START TRACE command is terminated.

Operator response

Change the DEST keyword to one of the following:

- OPX
- an OPX buffer that is owned by the current thread
- an OP buffer that is not in use

DSNW185I BEGIN TNO *trace-number* AUDIT POLICIES

Explanation

This message is part of the output from the DISPLAY TRACE command, which is described in message "DSNW127I" on page 1003.

DSNW189I THE AUDTPLCY KEYWORD IS NOT VALID WITH CLASS KEYWORD

Explanation

A trace command has been issued with conflicting keywords. The AUDTPLCY keyword cannot be specified with the CLASS keyword.

System action

Processing for the trace command is terminated.

Operator response

Correct the syntax, and reissue the command

Problem determination

Obtain a copy of the system or terminal log to verify command entry.

Related reference

-START TRACE (Db2) (Db2 Commands)
-DISPLAY TRACE (Db2) (Db2 Commands)
-STOP TRACE (Db2) (Db2 Commands)

DSNW190I THE AUDITPOLICY KEYWORD IS NOT VALID WITH IFCID OR CLASS KEYWORD IS NOT NEEDED.

Explanation

A trace command has been entered, but the AUDITPOLICY keyword cannot be specified with the IFCID keyword.

System action

The processing for the trace command is terminated.

Operator response

Correct the syntax, and reissue the statement.

Problem determination

Obtain a copy of the system or terminal log to verify command entry.

Related reference

-START TRACE (Db2) (Db2 Commands)
-DISPLAY TRACE (Db2) (Db2 Commands)
-STOP TRACE (Db2) (Db2 Commands)

DSNW192I AUDIT POLICY SUMMARY

Explanation

This message is issued as part of the -START TRACE output when AUDTPLCY is specified. This message indicates the start of the output and is followed by the summary of audit policies that started successfully.

Output from the command begins with this message and ends with message DSNW193I.

System action

Processing continues.

User response

No action is required.

Related reference

-START TRACE (Db2) (Db2 Commands)

Related information

DSNW193I
END AUDIT POLICY SUMMARY

DSNW193I END AUDIT POLICY SUMMARY

Explanation

This message is issued as part of the -START TRACE output when AUDTPLCY is specified, and indicates the end of the output from the command.

System action

Processing continues.

User response

No action is required.

Related reference

-START TRACE (Db2) (Db2 Commands)

Related information

DSNW192I
AUDIT POLICY SUMMARY

DSNW194I AUDIT POLICY *policy-name* STARTED

Explanation

This message is issued as part of the -START TRACE output when AUDTPLCY is specified if an audit policy was started successfully.

policy-name
The name of the audit policy that is active.

Output from the -START TRACE command begins with message DSNW192I and ends with message DSNW193I.

System action

Processing continues.

User response

No action is required.

Related reference
-START TRACE (Db2) (Db2 Commands)
Related information
DSNW192I
AUDIT POLICY SUMMARY

DSNW195I NO AUDIT POLICY STARTED SUCCESSFULLY

Explanation

A trace command has been entered to start audit policies, but audit policies cannot be started.

System action

The processing for the trace command is terminated.

The IFCID 362 trace record contains information about the failure.

Problem determination

Obtain a copy of the IFCID 362 trace record from the destination that is specified in the START TRACE command.

DSNW196I AUDIT POLICY *policy-name* NOT STARTED. REASON *reason-code*

Explanation

This message is issued as part of the -START TRACE output when AUDTPLCY is specified and at least one of the specified audit policies cannot be started.

Output from the command begins with message DSNW192I and ends with message DSNW193I.

policy-name
The name of the audit policy

reason-code
A Db2 reason code that indicates the cause of the failure.

System action

The processing for the trace command continues.

Operator response

Refer to the IFCID 362 trace record for additional information about the audit policy that was not started.

Problem determination

Obtain a copy of the IFCID 362 trace record from the destination that is specified in the START TRACE command.

Related concepts
Db2 reason codes (Db2 Codes)
Related reference
-START TRACE (Db2) (Db2 Commands)
Related information
DSNW192I
AUDIT POLICY SUMMARY

DSNW198I DISPLAY TRACE OUTPUT TO BE CONTINUED (CMDID=*command-id*)

Explanation

This message is part of the output from the DISPLAY TRACE command, which is described in message “DSNW127I” on page 1003.

DSNW199I DISPLAY TRACE OUTPUT CONTINUED (CMDID=*command-id*)

Explanation

This message is part of the output from the DISPLAY TRACE command, which is described in message “DSNW127I” on page 1003.

Chapter 19. DSNX messages

Message identifiers that begin with DSNX communicate information about the relational data system.

DSNX100I **bind-type SQL WARNING USING authorization-id AUTHORITY PLAN=plan-id DBRM=dbrm name STATEMENT=statement number object name IS NOT DEFINED**

Explanation

The indicated object is not defined in the Db2 catalog.

bind-type
Type of BIND subcommand that caused the warning: BIND, REBIND

authorization-id
Authorization ID used during the BIND process: for a BIND subcommand, indicates the authorization ID of the plan owner; for a REBIND subcommand, indicates the authorization ID of the owner specified by the subcommand, or the latest owner of the plan. If this is a remote rebind, and the OWNER was not specified in the subcommand, then REMOTE OWNER will be output.

Attention: If you are using a trusted context, the token *auth-id* might return a role instead of an authorization ID. A role is returned if a role was in effect and the authorization checking is performed against the role, rather than the authorization ID of the session, when the condition was encountered. Otherwise an authorization ID is returned. A role is returned in the following format as a single token:

- ROLE: *role-name*

plan-id
Name of the application plan specified in the BIND subcommand, blank if the application plan is not specified.

dbrm name
Name of the DBRM that contains the reference to the indicated object.

statement number
Statement number of the SQL statement referencing the name of the object.

object name
Name of the object that is not defined in the Db2 catalog.

System action

A valid plan is created if no errors are detected and VALIDATE(RUN) is in effect.

System programmer response

Ensure that the indicated table is created before the statement is executed. Otherwise, execution of this statement results in an error.

This statement is bound dynamically on each execution of the statement. For better performance, REBIND the application program after the indicated object is created.

DSNX101I **bind-type SQL WARNING USING authorization-id AUTHORITY PLAN=plan-id DBRM=dbrm name STATEMENT=statement number THE SPECIFIED AUTHORIZATION-ID DOES NOT HAVE THE PRIVILEGE TO PERFORM OPERATION op name ON OBJECT object name**

Explanation

The identified authorization ID does not have a privilege required for application plan execution. If the access control authorization exit is active and the AUTHEXIT_CHECK subsystem parameter is set to DB2, this error might occur if ACEE cannot be created for the package owner to perform the specified operation.

bind-type
Type of BIND subcommand that caused the warning: BIND or REBIND

authorization-id
Authorization ID used during the bind process. For a BIND subcommand, it is the authorization ID of the plan owner. For a REBIND subcommand, it is the authorization ID of the owner specified by the subcommand, or the latest owner of the plan. If this is a remote operation, and the OWNER was not specified in the subcommand, then REMOTE OWNER is output. **Attention:** If you are using a trusted context, the token *auth-id* might return a role instead of an authorization ID. A role is returned if a role was in effect and the authorization checking is performed against the role, rather than the authorization ID of the session, when the condition was encountered. Otherwise an authorization ID is returned. A role is returned in the following format as a single token:

- ROLE: *role-name*

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plan-id
Name of the application plan specified in the BIND subcommand. If the application plan is not specified, this field is blank.

dbrm name
Name of the DBRM that contains the unauthorized operation.

statement number
Statement number of the SQL statement containing the unauthorized operation.

System action

A valid plan is created if no errors are detected and VALIDATE(RUN) is in effect.

System programmer response

You must take one of the following actions before the statement can be executed. Otherwise, the execution of the statement results in an error.

- Ensure that the appropriate authority is granted to the invoker of the latest BIND subcommand against this application plan
- Invoke the BIND subcommand again using an authorization ID with authority to perform all the operations in this application plan.
- If you use the access control authorization exit and if the ACEE of the package owner cannot be created, ensure that the package owner is defined in RACF.

This statement is bound dynamically on each execution of the statement. For better performance, rebind the application program after the appropriate authority is granted to the invoker of the BIND subcommand against this application plan.

DSNX102I **bind-type SQL WARNING USING authorization-id AUTHORITY PLAN=plan-id DBRM=dbrm name STATEMENT=statement number THE REQUIRED INDEX HAS NOT BEEN CREATED ON TABLE table name IN PARTITIONED TABLESPACE table space name**

Explanation

There was an attempt to reference the table in the table space (both specified in the message) when the required index was not yet created.

bind-type
Type of BIND subcommand that caused the warning: BIND or REBIND

authorization-id
Authorization ID used during the bind process. For a BIND subcommand, it is the authorization ID of the plan owner. For a REBIND subcommand, it is the authorization ID of the owner specified by the subcommand, or the latest owner of the plan. If this is a remote operation, and the OWNER was not specified in the subcommand, then REMOTE OWNER is output. **Attention:** If you are using a trusted context, the token *auth-id* might return a role instead of an authorization ID. A role is returned if a role was in effect and the authorization checking is performed against the role, rather than the authorization ID of the session, when the condition was encountered. Otherwise an authorization ID is returned. A role is returned in the following format as a single token:

- ROLE: *role-name*

plan-id
Name of the application plan specified in the BIND subcommand. If the application plan is not specified, this field is blank.

dbrm name
Name of the DBRM that contains the reference to the indicated table.

statement number
Statement number of the SQL statement referencing the indicated table.

System action

A valid plan is created if no errors are detected and VALIDATE(RUN) is in effect.

System programmer response

Ensure that the required index on the indicated table in the partitioned table space is created before the statement is executed. Otherwise, execution of this statement results in an error. This statement is bound dynamically on each execution of the statement. For better performance, rebind the application program after the required index is created.

DSNX103I **bind-type SQL WARNING USING authorization-id AUTHORITY PLAN=plan-id DBRM=dbrm name STATEMENT=statement number BIND ISOLATION LEVEL RR CONFLICTS WITH TABLESPACE LOCKSIZE PAGE OR LOCKSIZE ROW**

Explanation

Because of the possible inconsistency between the isolation level of the application and the LOCKSIZE of the table space, table space locking is used to protect the integrity of the application.

bind-type
Type of BIND subcommand that caused the warning: BIND or REBIND

authorization-id
Authorization ID used during the bind process. For a BIND subcommand, it is the authorization ID of the plan owner. For a REBIND subcommand, it is the authorization ID of the owner specified by the subcommand, or the latest owner of the plan. If this is a remote operation, and the OWNER was not specified in the subcommand, then REMOTE OWNER is output.

Attention: If you are using a trusted context, the token *auth-id* might return a role instead of an authorization ID. A role is returned if a role was in effect and the authorization checking is performed against the role, rather than the authorization ID of the session, when the condition was encountered. Otherwise an authorization ID is returned. A role is returned in the following format as a single token:

- ROLE: *role-name*

plan-id
Name of the application plan specified in the BIND subcommand. If the application plan is not specified, this field is blank.

dbrm name
Name of the DBRM that contains the reference to the indicated table.

statement number
Statement number of the SQL statement referencing the indicated table.

System action

A valid plan is created if no errors are detected. Table space locking is used. RR isolation level is preserved.

System programmer response

If you do not want table space locking, use isolation level UR, CS or RS.

DSNX104I ***bind-type*** **SQL WARNING USING** ***authorization-id*** **AUTHORITY PLAN=*plan-id* DBRM=*dbrm-name* STATEMENT=*statement-number* THE RESULT OF DECIMAL MULTIPLICATION MAY CAUSE OVERFLOW**

Explanation

An arithmetic expression contains a decimal multiplication that might cause an overflow condition when the statement is executed. The problem can be corrected by restructuring the arithmetic expression so that decimal multiplication precedes decimal division or by changing the precision and scale of the operands in the arithmetic expression.

bind-type
Type of BIND subcommand that caused the warning: BIND or REBIND

authorization-id
Authorization ID used during the bind process. For a BIND subcommand, it is the authorization ID of the plan owner. For a REBIND subcommand, it is the authorization ID of the owner specified by the subcommand, or the latest owner of the plan. If this is a remote operation, and the OWNER was not specified in the subcommand, then REMOTE OWNER is output.

Important: If you are using a trusted context, the token *auth-id* might return a role instead of an authorization ID. A role is returned if a role was in effect and the authorization checking is performed against the role, rather than the authorization ID of the session, when the condition was encountered. Otherwise an authorization ID is returned. A role is returned in the following format as a single token:

- ROLE: *role-name*

plan-id
Name of the application plan specified in the BIND subcommand. If the application plan is not specified, this field is blank.

dbrm-name
Name of the DBRM that contains the reference to the indicated table.

statement-number
Statement number of the SQL statement referencing the indicated table.

System action

A valid plan is created if no errors are detected.

Related concepts
Decimal multiplication (Db2 SQL)
Decimal division (Db2 SQL)
Language elements (Db2 SQL)

DSNX105I **bind-type SQL WARNING USING authorization-id AUTHORITY PLAN=plan-id DBRM=dbrm name STATEMENT=statement number SQLCODE=sqlcode SQLSTATE=sqlstate TOKENS=token list**

Explanation

An SQL warning code was generated while processing an SQL statement.

bind-type
The type of subcommand that caused the warning: BIND or REBIND

authorization-id
Indicates the authorization ID used during the bind process. For a BIND subcommand, it is the authorization ID of the plan owner. For a REBIND subcommand, it is the authorization ID of the owner specified by the subcommand, or the latest owner of the plan. If this is a remote operation, and the OWNER was not specified in the subcommand, then REMOTE OWNER is output.

Attention: If you are using a trusted context, the token *auth-id* might return a role instead of an authorization ID. A role is returned if a role was in effect and the authorization checking is performed against the role, rather than the authorization ID of the session, when the condition was encountered. Otherwise an authorization ID is returned. A role is returned in the following format as a single token:

- ROLE: *role-name*

plan-id
Name of the application plan specified in the BIND subcommand. If the application plan is not specified, this field is blank.

sqlcode
A product specific code which identifies the particular SQL warning condition.

sqlstate
A common code which identifies the particular SQL warning condition.

dbrm name
Name of the DBRM that contains the problem.

statement number
Statement number of the SQL statement containing the problem.

token list
Sequence of one or more tokens separated by blanks.

System action

A valid plan is created if no errors are detected.

System programmer response

Refer to the information for the particular abend reason code issued. If the reason code is negative, this statement is bound dynamically on each execution of the statement. For better performance, rebind the application program after correcting this statement or after the required object is created or altered.

Related concepts
SQL codes (Db2 Codes)
Db2 reason codes (Db2 Codes)

DSNX106I **ATTEMPTED REBIND OF PACKAGE pkg-id RESULTED IN A TOTAL OF number ERRORS**

Explanation

Errors have been detected during the remote REBIND process. Only the first REBIND error will produce a specific message. Additional errors will simply be totaled, and the number will be returned to the user.

pkg-id
Name of the package specified in the subcommand.

number
Total number of errors in the remote REBIND

System action

The package was not rebound.

System programmer response

See previously output message to determine the initial error that caused the subcommand to be terminated unsuccessfully.

DSNX200I ***bind-type*** **SQL ERROR USING** ***authorization-id*** **AUTHORITY PLAN=*plan-id* DBRM=*dbrm-name* STATEMENT=*statement-number* SQLCODE=*sql-code* SQLSTATE=*sql-state*TOKENS=*token-list* CSECT=*csect-name* RDS CODE=*location-code***

Explanation

An error has been detected while processing an SQL statement.

bind-type
BIND or REBIND indicates type of bind subcommand that caused the error.

authorization-id
indicates the authorization ID used during the bind process. For a BIND subcommand, indicates the authorization ID of the plan owner. For a REBIND subcommand, indicates the authorization ID of the owner specified by the subcommand, or the latest owner of the plan.

Important: If you are using a trusted context, the token *auth-id* might return a role instead of an authorization ID. A role is returned if a role was in effect and the authorization checking is performed against the role, rather than the authorization ID of the session, when the condition was encountered. Otherwise an authorization ID is returned. A role is returned in the following format as a single token:

plan-id
Name of the application plan specified in the BIND subcommand. Blank if the application plan is not specified.

sql-code
A product specific code which identifies the particular SQL error detected.

sql-state
A common code which identifies the particular SQL error detected.

dbrm-name
Name of the DBRM that contains the error.

statement-number
Statement number containing the SQL error.

token-list
Optional sequence of one or more tokens separated by blanks.

csect-name
Name of the CSECT detecting the problem.

location-code
Unique code that identifies the location within the CSECT when the problem is detected.

System action

No application plan is created.

System programmer response

Correct the SQL errors in the application program associated with the indicated DBRM. Precompile the application program, and issue the bind subcommand again.

Related concepts
Db2 reason codes (Db2 Codes)
SQL codes (Db2 Codes)

DSNX201I **bind-type SQL ERROR USING authorization-id AUTHORITY PLAN=plan-id DBRM=dbrm name STATEMENT=statement number SQL CODE=sql code TOKENS=token list; bind-type DBRM ERROR USING authorization-id AUTHORITY PLAN=plan-id DBRM dbrm name IS IN AN INCONSISTENT STATE**

Explanation

The content of a DBRM has been modified after the precompilation process.

bind-type
Type of BIND subcommand that caused the warning: BIND, REBIND

authorization-id
Authorization ID of the plan owner. **Attention:** If you are using a trusted context, the token *auth-id* might return a role instead of an authorization ID. A role is returned if a role was in effect and the authorization checking is performed against the role, rather than the authorization ID of the session, when the condition was encountered. The role is returned in the following format as a single token: `ROLE: role-name`.

plan-id
Name of the application plan specified in the BIND or REBIND subcommand (or blank if the application plan is not specified).

dbrm name
Name of the DBRM that is in error.

System action

No application plan is created.

System programmer response

Precompile the application program associated with the indicated DBRM. Reinvoke the BIND subcommand.

DSNX202I **INVALID AMODE ATTRIBUTE FOUND FOR DATE OR TIME INSTALLATION REPLACEABLE EXIT ROUTINE *module-name***

Explanation

During Db2 startup, the Relational Data System subcomponent loads the Date (DSNXVDTX) and Time (DSNXVTMX) exit routines. These routines must have the link-edited attributes AMODE(31) and RMODE(ANY). The module listed in the message 'module-name' did not have the correct addressing attributes. If the date and time LOCAL installation option is specified, Db2 cannot execute the date and time functions required by the exit routine that failed to load.

System action

The load module is deleted. Db2 startup continues.

Operator response

Notify the system programmer.

System programmer response

When Db2 is stopped, the date and time exit routine must be link-edited again with the correct AMODE and RMODE control statements.

Related reference

Coding rules for exit routines (Db2 Administration Guide)

Related information

Exit routines (Db2 Administration Guide)

DSNX203I **LOAD OF THE DATE OR TIME INSTALLATION REPLACEABLE EXIT ROUTINE module-name FAILED WITH MVS ABEND CODE = abend-code REASON CODE = reason-code DB2 STARTUP WILL CONTINUE**

Explanation

During Db2 startup, the Relational Data System subcomponent loads the date (DSNXVDTX) and time (DSNXVTMX) exit routines. During the load of EXIT ROUTINE 'module-name', MVS issued the abend code and reason code that would cause abnormal termination of the task, but the abend was suppressed. If the date and time LOCAL option is specified, Db2 will be unable to execute the date and time functions required by the exit routine that failed to load.

System action

The load failed. Db2 startup continues.

Operator response

Notify the system programmer.

System programmer response

When Db2 is stopped, the date and time exit routine must be link-edited correctly.

Related reference

Coding rules for exit routines (Db2 Administration Guide)

Related information

Exit routines (Db2 Administration Guide)

DSNX204I ***csect-name*** **ERROR LOADING THE DB2 CATALOG, REASON *reason*: DB2 STARTED ACCESS(*MAINT*)**

Explanation

The internal structure (DBD) for the catalog database (DSNDB06) was either not found or was inconsistent when Db2 was started. See the appropriate reason for a more detailed description of the problem.

The value for *reason* is one of the following reason codes:

0
An error occurred reading the DBD01 table space. Check the Console for messages and SYS1.LOGREC for abends.

1
The expected level of the DBD for DSNDB06 is the previous release, but objects exist in the DBD for a current or later release.

2
The expected level of the DBD for DSNDB06 is the current release, but objects exist in the DBD for a later release.

3
The expected level of the DBD for DSNDB06 is a later release, but objects do not exist in the DBD for a later release.

4
The level of the DBD for DSNDB06 is unknown to this version of Db2.

The *mode* is one of the following:

*****
The DB01 tablespace could not be opened. Code/Catalog checks are deferred until it can be opened.

MAINT
The DB01 tablespace could be opened and a problem was detected. Prohibits access to any authorization IDs other than installation SYSADM and installation SYSOPR.

System action

Db2 was started ACCESS(MAINT).

This message is non-scrollable. It remains highlighted on the console until you take the appropriate action.

System programmer response

Db2 was started in ACCESS(*mode*). Do not run any CREATES, ALTERS, DROPS, GRANTs, REVOKEs or BINDs when in this state; it might corrupt your catalog and directory. Determine the problem with the DSNDB01.DBD01 table space. An improper REPAIR or RECOVER of the table space might have been run. Fix the problem while in ACCESS(MAINT) mode and then stop and start Db2.

Problem determination

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).

Related concepts

Recovery of catalog and directory tables (Db2 Administration Guide)

Related tasks

Recovering catalog and directory objects (Db2 Utilities)

Related reference

Db2 catalog tables (Db2 SQL)

DSNX205I ***csect-name*** **THE DATA DEFINITION CONTROL OBJECT DEFINITIONS AND ATTRIBUTES ON MEMBER** ***member-name*** **ARE NOT THE SAME.**

Explanation

One or more data definition control object definitions and attributes on member *member-name* and on this member are not the same. The data definition control object definitions and attributes are defined in the initialization parameter module DSNZPARM.

System action

Processing continues.

This message is non-scrollable. It remains highlighted on the console until you take the appropriate action.

System programmer response

Use the same data definition control table object definitions and attributes for all members of the Db2 data sharing group.

Related tasks

Installation step 17: Define and bind Db2 objects: DSNTIJSG (Db2 Installation and Migration)

Related reference

DSNTIPZ: Data definition control support panel (Db2 Installation and Migration)

Related information

Managing access through data definition control (Managing Security)

DSNX206I **LOAD OF THE ACCESS CONTROL AUTHORIZATION INSTALLATION REPLACEABLE EXIT ROUTINE** ***module-name*** **FAILED WITH MVS ABEND CODE =** ***abend-code*** **AND REASON CODE =** ***reason-code*** **DB2 STARTUP WILL CONTINUE**

Explanation

During Db2 startup, the Relational Data System subcomponent loads the Access Control Authorization (DSNX@XAC) exit routine. During the load of EXIT ROUTINE *module-name*, MVS issued the abend code and reason code that indicates abnormal termination of the task. However, the abend was suppressed. Db2 will not use the Access Control Authorization (DSNX@XAC) exit to perform authorization checking. Db2 authorization checking will be performed.

System action

The load failed. Db2 startup continues.

Operator response

Notify the system programmer.

System programmer response

After Db2 has stopped, you must properly link-edit the Access Control Authorization exit routine. \

Related reference

Coding rules for exit routines (Db2 Administration Guide)

Related information

Exit routines (Db2 Administration Guide)

DSNX207I **INVALID AMODE ATTRIBUTE FOUND FOR ACCESS CONTROL AUTHORIZATION INSTALLATION REPLACEABLE EXIT ROUTINE** ***module-name***

Explanation

During Db2 startup, the Relational Data System subcomponent loads the Access Control Authorization (DSNX@XAC) exit routine. This routine must have the link-edited attributes AMODE(31) and RMODE(ANY). The module listed in the message *module-name* did not have the correct addressing attributes. Db2 will not use the Access Control Authorization (DSNX@XAC)

exit to perform authorization checking. Db2 authorization checking will be performed.

System action

The system deletes the load module. Db2 startup continues.

Operator response

Notify the system programmer.

System programmer response

After Db2 has stopped, you must properly link-edit the Access Control Authorization exit routine with the correct AMODE and RMODE control statements.

Related reference

Coding rules for exit routines (Db2 Administration Guide)

Related information

Exit routines (Db2 Administration Guide)

DSNX208E ***csect-name*** **ATTEMPTING TO START DB2 WITH AN UNSUPPORTED CODE LEVEL. REASON CODE** ***reason*** **MISSING MAINTENANCE:** ***maint*** **CURRENT LEVEL** ***current-code-level*** **VALID LEVEL(S)** ***valid-code-levels***

Explanation

The Db2 member that is starting has a code level that is not compatible with the catalog or with some other component of Db2.

reason indicates the problem:

1
Db2 is attempting to start with a level of code that is not valid. The missing maintenance, *maint*, is unknown.

2
The level of code that is required by the catalog, which is indicated by *current-code-level*, is not a valid code level. The missing maintenance, *maint*, is unknown.

3
A preconditioning or toleration APAR has not been applied. The required APAR or level of code is specified by *maint*.

4
The preconditioning or toleration maintenance is on the Db2 subsystem, but maintenance to the catalog that is specified by *maint*, has not been applied.

9
Db2 is attempting to start with a Db2 11 code level; however, the current function level of the data sharing group is V12R1M502 or higher. The missing maintenance, *maint*, is unknown. The *current level*, *current-code-level*, and the valid level, *valid-code-levels*, are 0.

maint is an APAR number or a token that indicates a level of code. The value of *maint* is UNKNOWN if Db2 cannot determine the missing maintenance level.

current-code-level and *valid-code-levels* are for the use of your IBM service representative.

This message can occur in the following situations:

- The starting Db2 fell back from a later release and does not have the proper *maint* applied.
- The starting Db2 does not have the proper coexistence SPE, specified by *maint*, to start in a data sharing group, which is at a later release level.
- The starting Db2 is at a release in which coexistence with the data sharing group is not supported.

System action

Db2 terminates with reason code 00E7009D.

System programmer response

Verify that:

- Coexistence is supported between the releases you are trying to run.
- The Db2 startup procedure points to the correct set of load libraries.
- The correct SPE has been applied.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the Db2 print log map (DSNJU004) utility.

DSNX209E ***csect-name*** **MEMBER** ***member-name*** **IS AT A CODE LEVEL WHICH IS NOT COMPATIBLE WITH THIS STARTING OR MIGRATING MEMBER. REQUIRED LEVEL:** ***new-code-level*** **KNOWN LEVELS:** ***known-code-levels***

Explanation

The Db2 member that is starting will update the Db2 catalog, but the code level of that Db2 member is not compatible with the code level of the Db2 member that has already started. The Db2 subsystem at the earlier code level requires the correct SPE. The code level information in this message is for the use of your IBM service representative.

System action

Db2 terminates with reason code 00E7009D after detecting the Db2 members that cannot coexist.

System programmer response

Check the Db2 Program Directory and Preventive Service Planning updates (PSP) for more information about the SPE that is needed.

Verify that:

- Coexistence is supported between the releases you are trying to run.
- The Db2 startup procedure points to the correct set of load libraries.
- The correct SPE has been applied to all active members in the group.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the Db2 print log map (DSNJU004) utility.
- Unformatted DSN1PRNT output of the DSNDB01.DBD01 page set. Use the method described in Part 5 of *Diagnosis Guide and Reference* to locate the inconsistent DBD in the DSNDB01.DBD01 page set.

DSNX210I ***csect-name*** **- ACCESS CONTROL AUTHORIZATION EXIT ROUTINE (DSNX@XAC) HAS INDICATED THAT IT SHOULD NOT BE CALLED, HAS ABENDED OR HAS RETURNED AN INVALID RETURN CODE DURING** ***function-code*****. RETURN CODE=*****return-code*** **REASON CODE=*****reason-code*****. CUMULATIVE ABENDS DURING EXIT PROCESSING=*****abend-count*****. EXIT ROUTINE STATUS: *****stopped-running*****.**

Explanation

This message is issued during the initialization (Db2 startup) call or during an authorization check call to the exit routine, as identified by the *function-code*. The *return-code* and *reason-code* are returned in fields EXPLRC1 and EXPLRC2 of the EXPL parameter list for the exit routine.

This message is issued under the following circumstances:

Initialization

- The version of the exit routine is incompatible with this version of Db2.
- The exit routine returned an invalid code.
- The exit routine terminated abnormally during initialization.
- The exit routine returned-code is 12 indicating that it cannot perform authorization checks and should not be called.

In all of these cases the exit routine is stopped, as indicated by stopped- running=STOPPED.

Authorization checking

- The exit routine returned an invalid return code.
- The return code from the exit routine indicates that it cannot perform authorization checks and should not be called.
- The exit routine terminated abnormally during initialization.
- The agent which initiated the authorization activity was terminated or cancelled.

System action

Db2 performs different actions, depending on whether this error occurs during Db2 startup or during an authorization check:

Initialization - Db2 startup:

- If the version of the exit routine is incompatible with this version of Db2, an abend with code 00E70016 occurs and Db2 terminates.
- If the return-code is 12 or an unexpected value, then:
  - If *reason_code* is 16, an abend with code 00E70015 occurs and Db2 terminates.
  - If *reason_code* is not 16, an abend with code 00E70009 occurs, Db2 performs all subsequent authorization checks, and the exit is not called again.

- If an abend occurs during exit routine processing:
  - If the *reason_code* is 16, Db2 terminates.
  - If the *reason_code* is not 16, Db2 performs all subsequent authorization checks, and the exit is not called again.

Authorization check:

- If the return-code is 12 or an unexpected value, then:
  - If the initialization *reason_code* was 16, an abend with code 00E70015 occurs and Db2 terminates.
  - If the initialization *reason_code* was not 16, an abend with code 00E70009 occurs, Db2 performs all subsequent authorization checks, and the exit is not called again.
- If an abend occurs during exit routine processing, a certain number of abends are tolerated before the exit stops being called. Subsystem parameter AEXITLIM (AUTH EXIT LIMIT) determines this limit. The exit routine will continue running until it exceeds the abend tolerance limit. In addition, the following will occur:
  - If the initialization *reason_code* was 16, Db2 terminates.
  - If the initialization *reason_code* was not 16, Db2 performs all subsequent authorization checks.

Operator response

Notify the system programmer.

System programmer response

Refer to the documentation of the access control authorization exit routine for an explanation of *reason_code*. Correct the situation that caused the reason code.

If this message was issued because of an abend during exit routine processing, then search the system log to determine its cause and correct the situation.

If abend code 00E70016 was issued indicating that the version of the exit routine is incompatible with this version of Db2, install the correct version of the exit routine. Refer to the documentation in the Administration Guide for information on the access control authorization exit. For information on the RACF access control module shipped with Db2 refer to the RACF Access Control Module Guide.

If Db2 terminated, restart Db2. If Db2 did not terminate, you need to restart Db2 to reactivate the exit.

Problem determination

Since the access control authorization exit routine is external to Db2, refer to the documentation of the exit routine for an explanation of *return_code* and *reason_code* and a resolution to the problem.

If this message was issued because of an abend during exit routine processing, then determine the cause of the abend from messages in the system log and address it. Look for system messages that occurred at approximately the same time to find more information about the abend.

DSNX211I **LOAD OF THE ICSF LOAD MODULE *module-name* FAILED WITH THE RETURN CODE *return-code* AND REASON CODE *reason-code* DB2 STARTUP CONTINUES.**

Explanation

Db2 cannot load the ICSF load module *module-name*. Refer to the z/OS ICSF documentation for explanations of the *return-code* reason code.

System action

Db2 startup continues but the encryption/decryption services are not available.

User response

Ensure that the ICSF SCSFMOD0 load module is in the LINKLIST for the z/OS system.

DSNX230I **A RESOURCE IS UNAVAILABLE WHEN TRYING TO BUILD THE TRUSTED CONTEXT CACHE REASON=*reason-code* TYPE OF RESOURCE=*resource-type* RESOURCE NAME=*resource-name***

Explanation

During Db2 startup or at the first attempt to create a connection or at a commit related to the TRUSTED CONTEXT DDL statements, an error is encountered while building the trusted context cache and accessing the catalog.

reason-code
The reason code returned by Data Manager during Db2 catalog access.

resource-type* and *resource-name
The type and name of the resource that the message identifies. For an explanation of *resource-type* and *resource-name* values, see Appendix C, "Resource types," on page 1171.

An attempt to rebuild the trusted context cache will be made at the next Db2 startup, or during commit for the TRUSTED CONTEXT related DDL statements or attempt to establish a connection.

System action

The trusted context cache is not built and subsequent connections are not trusted connections, until the problem is resolved. Db2 startup continues if the console message is issued during the startup. If the message is issued during a remote connect attempt to use the trusted connection, SQLCODE +20360 is returned. If the message is issued when DSN ASUSER is specified, DSNE137I message is returned.

If the message is issued during the commit for TRUSTED CONTEXT related DDL statements, the Db2 catalog is updated, but the trusted context cache is not updated.

Operator response

Notify the system programmer.

System programmer response

The message is issued when an error is encountered while trying to access the catalog table space, DSNDB06.SYSCONTX. The reason code indicates the cause of the failure. Verify the identity of the resource that was not available. Check if there is any prior abend messages in the console. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

DSNX231I THE TRUSTED CONTEXT CACHE BUILD PROCESS COMPLETED SUCCESSFULLY

Explanation

The trusted context cache is built successfully with trusted context entries in the Db2 catalog. Db2 uses the trusted context cache to determine if a connection is trusted or not.

System action

Db2 is ready for trusted context connections.

DSNX232E A RESOURCE IS UNAVAILABLE WHEN TRYING TO DETERMINE IF AUDIT POLICIES ARE TO BE STARTED DURING DB2 START UP REASON=*reason-code* TYPE OF RESOURCE=*resource-type* RESOURCE NAME=*resource-name*

Explanation

During Db2 startup, an error was encountered accessing the catalog. This error occurred when trying to determine if audit policies are to be started.

reason-code
The Db2 reason code value that indicates the reason for the failure. For explanations of reason codes, see Db2 reason codes (Db2 Codes).

resource-type* and *resource-name
The type and name of the resource that the message identifies. For an explanation of *resource-type* and *resource-name* values, see Appendix C, "Resource types," on page 1171.

System action

The audit policies that are defined to be started during Db2 startup are not started. Db2 startup continues.

Operator response

Notify the system programmer.

System programmer response

The message is issued when an error is encountered while trying to access the catalog table space, DSNDB06.SYSTSADT. The *reason-code* value indicates the cause of the failure.

Verify the identity of the resource that was not available. Check if there any prior abend messages are on the console. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Related concepts

Db2 reason codes (Db2 Codes)

Related information

Resource types
Type codes are associated with particular types of resources.

DSNX233E AUDIT POLICIES SPECIFIED TO BE STARTED AT DB2 STARTUP EXCEED THE ALLOWED LIMIT

Explanation

The number of audit policies that are specified to be started during Db2 startup exceeded the allowed limit.

Up to eight audit policies can be specified for the same value in the DB2START column of the SYSIBM.SYSAUDITPOLICIES table.

System action

Audit policies are not started for a DB2START column value that has more than eight audit policies specified. All other audit policies that are defined to be started at Db2 startup are started. Db2 startup continues.

System programmer response

1. Correct the audit policy definition in the SYSIBM.SYSAUDITPOLICIES table.
2. Use the START TRACE command to start the required audit policies.

Related reference

-START TRACE (Db2) (Db2 Commands)

Db2 catalog tables (Db2 SQL)

DSNX234I ***csect-name*** **CANNOT INITIALIZE XML SCHEMA VALIDATION FUNCTION:** ***function-name*****. RETURN CODE='*return-code*'X AND REASON CODE='*reason-code*'X.**

Explanation

The invocation of the z/OS XML System Services macro that loads the required module for XML schema validation failed.

csect-name
The name of the control section that issued the message.

function-name
The name of the XML schema validation function that failed.

return-code
The return code from the z/OS XML System Services call.

reason-code
The reason code from the z/OS XML System Services call.

System action

Db2 subsystem startup processing continues.

System programmer response

If you use XML schema validation, complete one of the following actions:

- Use the return and reason codes issued by XML System Services to correct the problem, and restart Db2.
- Execute the following command to load the required z/OS XML System Services module:

```
SETPROG LPA,ADD,MODNAME=(GXLIMODV),DSNAME=
SYS1.SIEALNKE
```

Related reference

z/OS XML System Services User's Guide and Reference

DSNX235I **REGISTRATION OF THE RACF ENF MESSAGE LISTENER EXIT WITH THE ENF FACILITY FOR ENF** ***enf-signal*** **FAILED WITH RETURN CODE** ***return-code*****.**

Explanation

The process that registers Db2 with the RACF Event Notification Facility (ENF) message listener exit for listening to the specified ENF signal returned an unexpected return code.

enf-signal
The possible values are 62, 71, and 79.

return-code
Hexadecimal value of the z/OS ENFREQ macro return code.

System action

Db2 is not registered to listen to the specified ENF signal notification. Db2 continues its startup.

System administrator response:
Notify the security administrator. Restart Db2 after the ENF signal notification problem is fixed.

Security administrator response:
Make sure that Db2 is registered to listen to the specified ENF signal notification.

Operator response

No action is required.

DSNX236I **A RESOURCE** ***resource-name*** **TYPE OF RESOURCE** ***resource-type*** **FOR PROCESSING ENF SIGNAL FOR AUTHID** ***auth-id*** **OPERATION** ***operation*** **ON OBJECT** ***object-name*** **IS NOT AVAILABLE FOR REASON** ***reason-code*****. ENF SIGNALS RECEIVED FOR CLASS** ***class-name*** **ARE NOT PROCESSED FOR PACKAGE INVALIDATION.**

Explanation

The ENF signal process for package invalidation has failed because a required resource *resource-name* is

not available. The ENF signals received for the class *class-name* are not processed.

resource-type* and *resource-name
The type and name of the resource that the message identifies. For an explanation of *resource-type* and *resource-name* values, see Appendix C, "Resource types," on page 1171.

auth-ID
The authorization identifier that is identified in the message. The authorization-ID can be a role.

operation
The operation that is performed.

object-name
The name of the object. If the operation is EXECUTE PACKAGE, the object name consists of the collection ID and the package name. For all other operations, the object name consists of the schema name and the object name.

reason-code
A numeric value that indicates the reason for the failure of the operation.

class-name
The name of the RACF resource class for Db2 objects and administrative authorities.

System action

The ENF signal processing continues.

System administrator response:
Ensure that the required resource is available for the ENF signal process. Manually restart the package invalidation process. Notify the security administrator.

Security administrator response:
Identify the RACF commands that were issued to remove resource access for the specified RACF class. Permit the user access to the identified resources and then delete the permissions in RACF.

Operator response

No action is required.

DSNX237I **AN ABEND HAS OCCURRED DURING ENF SIGNAL PROCESSING. ENF SIGNALS RECEIVED FOR CLASS *class-name* ARE NOT PROCESSED.**

Explanation

An abend occurred during processing of the ENF signal that was received from the security server, while Db2 was up or during Db2 restart. The ENF signals received for the class-name are not processed.

class-name
RACF resource class for Db2 objects and administrative authorities

System action

The ENF signal processing continues.

System administrator response:
Manually restart the cache refresh and package invalidation processes. Notify the security administrator.

Security administrator response:
Identify the RACF commands that were issued to remove resource access for the specified RACF class. Permit the user access to the identified resources and then delete the permissions in RACF.

Operator response

No action is required.

DSNX238I **RACROUTE *racroute-request-type* REQUEST FOR *authorization-ID* FAILED FOR OPERATION *operation* ON *target*. SYSTEM AUTHORIZATION FACILITY RETURN CODE *saf-return-code* SECURITY SERVER RETURN CODE *security-server-return-code* SECURITY SERVER REASON CODE *security-server-reason-code* SECURITY SERVER AUTHORIZATION CHECK FAILED FOR DSNR CLASS RESOURCE *resource-name***

Explanation

The access control authorization exit (DSNX@XAC) is active. The Db2 subsystem parameter AUTHEXIT_CHECK is set to DB2, so that the owner of an object is used for authorization checks. When the owner attempted to perform an operation on the indicated object, the operation failed because creation of an ACEE for the owner failed.

racroute-request-type
The RACROUTE REQUEST type that was sent to the system authorization facility (SAF).

authorization-ID
The authorization ID.

operation
The operation that was performed.

target
The target of the operation that is performed. Possible values are:

- SYSTEM, if the operation applies to an entire Db2 subsystem.
- The name of the object on which the operation is performed.

saf-return-code
The error code that was returned from SAF.

security-server-return-code
The return code that was returned from a security server, such as RACF.

security-server-reason-code
The reason code that was returned from a security server, such as RACF.

resource-name
The name of the resource that RACF performed authorization check during the creation of the ACEE for the owner.

For example, if the security server is RACF, and the object owner is not defined to RACF, SAF code 4, RACF return code 4, and RACF reason code 0 are displayed in this message.

System action

The statement or the command cannot be processed.

System programmer response
To correct the error, verify that the authorization ID is defined to the security server.

If the security server is RACF, and the authorization ID is a RACF group, verify that the authorization ID has been permitted access to the resource that is associated with the connection in the RACF DSNR class.

Related reference

Authorization IDs and ACEEs (Managing Security)
AUTH EXIT CHECK (AUTHEXIT_CHECK subsystem parameter) (Db2 Installation and Migration)
RACROUTE REQUEST=VERIFY (standard form) (Security Server RACROUTE Macro Reference)
RACROUTE REQUEST=AUTH: Return codes and reason codes (Security Server RACROUTE Macro Reference)

DSNX240I ***csect-name*** **EXTERNALIZATION OF STATISTICS RECOMMENDATIONS HAS BEEN STOPPED.**

Explanation

The task used to populate SYSIBM.SYSSTATFEEDBACK is no longer running. This result can occur at Db2 startup if Db2 is unable to start the task or if this task terminates abnormally.

System action

Processing continues, but Db2 no longer externalizes statistics recommendations to SYSIBM.SYSSTATFEEDBACK automatically until Db2 is recycled. In most cases, the ACCESS DATABASE command with parameter MODE(STATS) can still be used to populate SYSIBM.SYSSTATFEEDBACK.

Missing statistics that are identified during the explain process continue to be written to the DSN_STAT_FEEDBACK explain table.

System programmer response

This message is issued when the asynchronous task that handles externalization of the missing statistics to the SYSIBM.SYSSTATFEEDBACK table is no longer running. If this situation happens at Db2 startup, check if the system is short on storage or has other restrictions that might preclude the creation of a TCB. Otherwise, check the system log to determine the cause of the abnormal task termination.

DSNX800I ***csect-name*** **ACCELERATOR FUNCTION IS NOT AVAILABLE**

Explanation

The accelerator service is not available. Either a subsystem parameter is not set to enable query acceleration or an error occurred during initialization.

csect-name
The name of the control section that issued the message.

System action

Processing continues without acceleration.

User response

Check the value of the ACCEL subsystem parameter. If the value is NO, query acceleration is disabled. Change the value to AUTO or COMMAND, recycle Db2, and reissue the command.

If the ACCEL subsystem parameter is already set to AUTO or COMMAND, determine the cause of the initialization failure. Check that the accelerator catalog tables (SYSACCEL.SYSACCELERATORS and SYSACCEL.SYSACCELERATEDTABLES) were created correctly. Also, check the accelerator installation information.

Severity

4 (warning)

Related concepts

Accelerators for Db2 for z/OS queries (Db2 Performance)

Related reference

ACCELERATION STARTUP field (ACCEL subsystem parameter) (Db2 Installation and Migration)

SYSACCEL.SYSACCELERATORS table (Db2 SQL)

SYSACCEL.SYSACCELERATEDTABLES table (Db2 SQL)

Related information

IBM Db2 Analytics Accelerator for z/OS documentation

DSNX801I *csect-name* ACCELERATOR PROCESSING STARTING

Explanation

Support for the accelerator service is initializing.

csect-name
The name of the control section that issued the message.

System action

Processing continues.

User response

No action is required.

Severity

0 (informational)

DSNX802I *csect-name* ACCELERATOR PROCESSING ON *accelerator-name* DETECTED A PROBLEM

Explanation

The accelerator service for the specified server detected a problem and did not start.

csect-name
The name of the control section that issued the message.

accelerator-name
The name of the accelerator server.

System action

The accelerator service does not start. Reason code 00E7000A is issued and a dump is generated.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- The dump that accompanies reason code 00E7000A.

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Severity

4 (warning)

Related information

00E7000A (Db2 Codes)

DSNX809I *csect-name* ACCELERATOR PROCESSING STOP COMPLETE

Explanation

The accelerator service is no longer active.

csect-name
The name of the control section that issued the message.

System action

Processing continues without acceleration.

User response

No action is required.

Severity

0 (informational)

DSNX810I *csect-name command-name* ACCEL FOLLOWS -

Explanation

This message is part of the output of an accelerator command and provides a heading for other messages that are generated by the command.

csect-name
The name of the control section that issued the message.

command-name
The command that was issued.

System action

Processing continues.

User response

No action is required.

Related reference

-DISPLAY ACCEL (Db2) (Db2 Commands)
-START ACCEL (Db2) (Db2 Commands)
-STOP ACCEL (Db2) (Db2 Commands)

DSNX811I ***csect-name*** **NAME** ***accelerator-name*** **INVALID, ACCELERATOR IGNORED.**

Explanation

The specified accelerator server is not known.

csect-name
The name of the control section that issued the message.

accelerator-name
The name of the accelerator server.

System action

Processing continues.

User response

Correct the accelerator name, and resubmit the command.

Severity

8 (error)

DSNX812I ***csect-name*** **SCOPE(GROUP) CANNOT BE PROCESSED DUE TO COMMAND ALREADY IN PROGRESS**

Explanation

A DISPLAY ACCEL, START ACCEL, or STOP ACCEL command was issued with the with SCOPE(GROUP) parameter at the same time that another data sharing member was processing a command. Db2 could not obtain the lock necessary to serialize these commands.

csect-name
The name of the control section that issued the message.

System action

The command is not processed on any members of the data sharing group.

User response

Wait until the command that is already in progress completes, and resubmit this command. If the command that is already in progress does not complete, stop it.

Severity

8 (error)

Related reference

-DISPLAY ACCEL (Db2) (Db2 Commands)
-START ACCEL (Db2) (Db2 Commands)
-STOP ACCEL (Db2) (Db2 Commands)

DSNX813I ***csect-name*** **MEMBER(*member-name*) COMMAND CANNOT BE PROCESSED DUE TO COMMAND ALREADY IN PROGRESS**

Explanation

A DISPLAY ACCEL, START ACCEL, or STOP ACCEL command was issued with the MEMBER(*member-name*) option at the same time that another data sharing member was processing a SCOPE(GROUP) or MEMBER(*member-name*) command. Db2 could not obtain the lock necessary to serialize these commands.

csect-name
The name of the control section that issued the message.

member-name
The member name of the Db2 data sharing member that is not in this data sharing group.

System action

The command is not processed on any members of the data sharing group.

User response

Wait until the command that is already in progress completes, and resubmit this command. If the command that is already in progress does not complete, stop it.

Severity

8 (error)

Related reference
-DISPLAY ACCEL (Db2) (Db2 Commands)
-START ACCEL (Db2) (Db2 Commands)
-STOP ACCEL (Db2) (Db2 Commands)

DSNX814I ***csect-name*** **MEMBER** ***member-name*** **IS NOT IN THIS DATA SHARING GROUP**

Explanation

The member list contains an invalid member name.

csect-name
The name of the control section that issued the message.

member-name
The member name of the Db2 data sharing member that is not in this data sharing group.

System action

Processing continues.

User response:
Correct the member name, and resubmit the command.

Severity

8 (error)

DSNX815I ***csect-name*** **ACCELERATOR** ***accelerator-name*** **WAS NOT FOUND OR HAS NOT BEEN STARTED SINCE LAST DB2 RESTART**

Explanation

The specified accelerator has not been started since the last time that Db2 was restarted.

csect-name
The name of the control section that issued the message.

accelerator-name
The name of the accelerator server.

System action

Processing continues.

User response

Correct the accelerator name, and resubmit the command.

If the accelerator name is correct, make sure the accelerator is started by issuing the START ACCEL command.

Severity

8 (error)

Related reference
-DISPLAY ACCEL (Db2) (Db2 Commands)
-START ACCEL (Db2) (Db2 Commands)

DSNX816I ***csect-name*** **NO ACCELERATORS FOUND**

Explanation

No accelerators have been started.

csect-name
The name of the control section that issued the message.

System action

Processing continues.

User response

Define one or more accelerators, and resubmit the command.

Severity

8 (error)

DSNX817I ***csect-name*** **MEMBER KEYWORD IS NOT ALLOWED FOR THE** ***command-name*** **COMMAND IN A NON-DATA SHARING SUBSYSTEM**

Explanation

A command that included the MEMBER keyword was issued in a non-data sharing environment, but the MEMBER keyword in not supported in non-data sharing environments.

csect-name
The name of the control section that issued the message.

command-name
The command that was issued.

System action:
The command is not processed.

User response:
Remove the MEMBER keyword and resubmit the command.

Related reference

-DISPLAY ACCEL (Db2) (Db2 Commands)
-START ACCEL (Db2) (Db2 Commands)
-STOP ACCEL (Db2) (Db2 Commands)

Related information

"DSNX819I" on page 1030
csect-name DISPLAY TERMINATED DUE TO INSUFFICIENT MESSAGE SPACE

DSNX818I *csect-name command-name* ACCEL INCOMPLETE

Explanation

A multi-line message is incomplete for a command. There is not enough storage space available to store the required information from this command.

csect-name
The name of the control section that issued the message.

command-name
The command that was issued.

System action

Processing continues.

Message DSNX819I follows and provides additional information.

User response

No action is required.

Related reference

-DISPLAY ACCEL (Db2) (Db2 Commands)
-START ACCEL (Db2) (Db2 Commands)
-STOP ACCEL (Db2) (Db2 Commands)

Related information

DSNX819I
csect-name DISPLAY TERMINATED DUE TO INSUFFICIENT MESSAGE SPACE

DSNX819I *csect-name* DISPLAY TERMINATED DUE TO INSUFFICIENT MESSAGE SPACE

Explanation

There is not enough storage available to store the required information from this command.

csect-name
The name of the control section that issued the message.

System action

The display is truncated.

System programmer response

Resubmit the command, specifying a smaller number of accelerator servers.

Related reference

-DISPLAY ACCEL (Db2) (Db2 Commands)
-START ACCEL (Db2) (Db2 Commands)
-STOP ACCEL (Db2) (Db2 Commands)

Related information

DSNX818I
csect-name command-name ACCEL INCOMPLETE

DSNX820I *csect-name* START ACCELERATOR SUCCESSFUL FOR *accelerator-name*

Explanation

The specified accelerator server is started.

csect-name
The name of the control section that issued the message.

accelerator-name
The name of the accelerator server.

System action

Processing continues.

User response

No action is required.

Severity

0 (informational)

Related reference

-START ACCEL (Db2) (Db2 Commands)

DSNX821I *csect-name* ALL ACCELERATORS STARTED.

Explanation

All accelerator servers are started.

csect-name
The name of the control section that issued the message.

System action

Processing continues.

User response

No action is required.

Severity

0 (informational)

DSNX822I ***csect-name*** **START ACCELERATOR UNSUCCESSFUL FOR** ***accelerator-name*** **REASON** ***reason-code***

Explanation

The accelerator server is not started.

csect-name
The name of the control section that issued the message.

accelerator-name
The name of the accelerator server.

reason-code
The Db2 reason code value that indicates the reason for the failure. For explanations of reason codes, see Db2 reason codes (Db2 Codes).

System action

Processing continues.

User response

Use the information that is provided for the reason code to resolve the problem, then try to start the service.

Severity

8 (error)

Related concepts
Db2 reason codes (Db2 Codes)
Related reference
-START ACCEL (Db2) (Db2 Commands)

DSNX823I ***csect-name*** **ACCELERATOR** ***accelerator-name*** **ALREADY STARTED**

Explanation

The specified accelerator server is already active.

csect-name
The name of the control section that issued the message.

accelerator-name
The name of the accelerator server.

System action

Processing continues.

User response

No action is required.

Severity

0 (informational)

DSNX830I ***csect-name***

Explanation

This message displays output from the DISPLAY ACCEL command.

csect-name
The name of the control section that issued the message.

The output provides the following information about the accelerator server or servers:

```
ACCELERATOR                          MEMB   STATUS
REQUESTS ACTV QUED MAXQ
------------------------------ ---- --------
-------- ---- ---- ----
text                                 text
text          num  num  num  num
```

For data sharing, the list of accelerator servers are grouped by member. The list for each member, other than the first list, begins with a DSN9035I message.

ACCELERATOR
The name of the accelerator server.

MEMB
The name of the Db2 data-sharing member.

STATUS
The status of the accelerator server. The status can be any of the following values:

STARTED
The accelerator server is able to accept requests.

STARTEXP
The accelerator server was started with the EXPLAINONLY option and is available only for EXPLAIN requests.

STARTMNT
The accelerator server was started with the ACCESS(MAINT) option and is available only to installation SYSADM and installation SYSOPR.

STOPPEND
The accelerator server is no longer accepting new requests. Active accelerator threads are allowed to complete normally, and queued accelerator threads are terminated. The

accelerator server was placed in this status by the STOP ACCEL MODE(QUIESCE) command.

STOPPED
The accelerator server is not active. New requests for the accelerator are rejected. The accelerator server was placed in this status by the STOP ACCEL command.

STOPERR
The accelerator server is not active. The accelerator server was placed in this status by an error condition. New requests for the accelerator are rejected.

REQUESTS
The number of query requests that have been processed successfully for this Db2 system.

ACTV
The current number of active, accelerated requests for this Db2 system.

QUED
The current number of queued requests.

MAXQ
The highest number of queued requests that have been reached since the accelerator was started.

Detailed output

If the DISPLAY ACCEL command is issued with the DETAIL option, the following additional information is provided about the accelerator server.

If the DISPLAY ACCEL command is issued with the DETAIL option, the following additional information is provided about the accelerator server:

```
LOCATION=text heartbeat-status
DETAIL STATISTICS
  LEVEL  = text
  STATUS = text
  FAILED
REQUESTS
  =       num
  AVERAGE QUEUE
WAIT
=       num MS
  MAXIMUM QUEUE
WAIT
=       num MS
  TOTAL NUMBER OF ACTIVE
PROCESSORS                          =       num
  AVERAGE CPU UTILIZATION ON COORDINATOR
NODES               =       num %
  AVERAGE CPU UTILIZATION ON WORKER
NODES                       =       num %
  AVERAGE DISK IO
UTILIZATION                                 =
num %
  NUMBER OF ACTIVE WORKER
NODES                                =       num
  TOTAL DISK
STORAGE
=       num MB
  DISK STORAGE IN USE FOR THIS DB2
SYSTEM                      =       num MB
  DISK STORAGE IN USE FOR ALL DB2
SYSTEMS                     =       num MB
  TOTAL CPU FOR REQUESTS FOR THIS DB2
SYSTEM                 =       num MS
  TOTAL CPU FOR DATA MAINTENANCE FOR THIS DB2
SYSTEM         =       num MS
  TOTAL CPU FOR REPLICATION FOR THIS DB2
SYSTEM             =       num MS
  TOTAL MEMORY AVAILABLE FOR USER
DATA                           =       num MB
  TOTAL MEMORY AVAILABLE FOR SQL
PROCESSING                     =       num MB
  INBOUND NETWORK UTILIZATION OF THE
ACCELERATOR              =       num %
  OUTBOUND NETWORK UTILIZATION OF THE
ACCELERATOR              =       num %
```

LOCATION
The location name of the accelerator server as specified in table SYSACCEL.SYSACCELERATORS.

heartbeat-status
The health status of the accelerator server. The status can be any of the following values:

HEALTHY
The accelerator server is accepting and processing requests.

BUSY
The accelerator server is processing requests, but it is not accepting new requests.

FLATLINE
The accelerator server is not responding.

AUTHFAIL
Db2 and the accelerator server could not establish the credentials that are required to communicate with each other. The accelerator server did not accept the value of the ACCELERATORAUTHTOKEN column in the SYSACCELERATORS table for this accelerator.

DDFFAIL
A DDF problem occurred during connection to the accelerator server. Messages on the z/OS console that begin with DSNL provide information for resolving the problem.

LEVEL
The product level of the accelerator.

STATUS
The status of the accelerator server. For IBM IBM Db2 Analytics Accelerator for z/OS, Version 4 and later, the status can be any of the following values:

INITIALIZING
The system is still initializing. The accelerator server is not ready for use.

ONLINE
The accelerator server is operational and ready for use.

OFFLINE
The accelerator server is offline and not operational.

MAINTENANCE
The accelerator server is in maintenance mode and is not operational.

UNKNOWN
The accelerator server is in an error state and is not operational.

For IBM Db2 Analytics Accelerator for z/OS, Version 3 and earlier, the status can be any of the following values:

- **INITIALIZED**
- **ONLINE**
- **PAUSED**
- **OFFLINE**
- **STOPPED**
- **MAINTENANCE**
- **DOWN**
- **UNKNOWN**

FAILED REQUESTS
The number of failed requests for the accelerator.

AVERAGE QUEUE WAIT
The length of the average queue wait time within the accelerator, measured in milliseconds.

MAXIMUM QUEUE WAIT
The length of the maximum queue wait time within the accelerator, measured in milliseconds.

TOTAL NUMBER OF ACTIVE PROCESSORS
The number of active processors within the accelerator. For a multi-core processor, each core is counted as a separate processor.

AVERAGE CPU UTILIZATION ON COORDINATOR NODES
Average processor utilization for coordinator node in this accelerator server. This value is a number in the range 0.00-100.00, where 0.00 indicates that all processors are idle, and 100.00 means that all processors are fully used.

This value does not represent the current state of processor utilization, but rather the average utilization within the last 60 seconds. The returned value is the average, calculated over all coordinator nodes within the accelerator since startup.

AVERAGE CPU UTILIZATION ON WORKER NODES
The average processor utilization for worker nodes in this accelerator server. This value is a number in the range 0.00-100.00, where 0.00 indicates that all processors are idle, and 100.00 means that all processors are fully used.

This value does not represent the current state of processor utilization, but rather the average utilization within the last 60 seconds. The returned value is the average, calculated over all worker nodes within the accelerator since startup.

AVERAGE DISK IO UTILIZATION
The average I/O disk utilization of the worker nodes in this accelerator server. This value is the percentage of the available I/O channels and resources that are being used.

NUMBER OF ACTIVE WORKER NODES
The number of active worker nodes in the accelerator.

TOTAL DISK STORAGE
The total amount of disk storage that is available in the accelerator, measured in megabytes (MB).

DISK STORAGE IN USE FOR THIS Db2 SYSTEM
The amount of disk storage that is being used by this Db2 subsystem within the accelerator, measured in megabytes (MB).

DISK STORAGE IN USE FOR ALL Db2 SYSTEMS
The amount of disk storage that is being used by all of the connected Db2 subsystems within the accelerator, measured in megabytes (MB).

TOTAL CPU FOR REQUESTS FOR THIS Db2 SYSTEM
The total processor time that is associated with running requests in the accelerator for this Db2 system.

TOTAL CPU FOR DATA MAINTENANCE FOR THIS Db2 SYSTEM
The total processor time for data maintenance operations in the accelerator for this Db2 system.

TOTAL CPU FOR REPLICATION FOR THIS Db2 SYSTEM
The total processor time that is associated with the replication apply process in the accelerator for this Db2 system.

TOTAL MEMORY AVAILABLE FOR USER DATA
The amount of memory, in MBs, that is configured for buffer pools across all worker nodes, as opposed to the physical memory of the accelerator.

TOTAL MEMORY AVAILABLE FOR SQL PROCESSING
The amount of memory, in MBs, that is available for processing SQL statements in the accelerator.

INBOUND NETWORK UTILIZATION OF THE ACCELERATOR
The percentage of network resources that are being consumed to service inbound requests to the accelerator.

OUTBOUND NETWORK UTILIZATION OF THE ACCELERATOR
The percentage of network resources that are being consumed to return query results from the accelerator.

The output terminates with message DSNX859I.

System action

Processing continues.

User response

No action is required.

Related reference

-DISPLAY ACCEL (Db2) (Db2 Commands)
SYSACCEL.SYSACCELERATORS table (Db2 SQL)

Related information

DSN9035I
BEGIN OF DISPLAY FOR MEMBER: *memname*

DSNX859I *csect-name command-name* REPORT COMPLETE

Explanation

This message marks the end of the report that started with message DSNX830I.

csect-name
The name of the control section that issued the message.

command-name
The command that was issued.

System action

Processing continues.

User response

No action is required.

Related information

DSNX830I
csect-name

DSNX860I *csect-name* STOP ACCELERATOR SUCCESSFUL FOR *accelerator-name*

Explanation

The accelerator server is stopped.

csect-name
The name of the control section that issued the message.

accelerator-name
The name of the accelerator server.

System action

Processing continues.

User response

No action is required.

Severity

0 (informational)

DSNX861I *csect-name* ALL OTHER ACCELERATORS STOPPED

Explanation

A STOP ACCEL(*) command is currently in effect. Any accelerators that are not listed in the preceding DSNX860I messages are stopped.

csect-name
The name of the control section that issued the message.

System action

Processing continues.

User response

No action is required.

Severity

0 (informational)

Related information

DSNX860I
csect-name STOP ACCELERATOR SUCCESSFUL FOR *accelerator-name*

DSNX862I *csect-name* ACCELERATOR *accelerator-name* ALREADY STOPPED OR IS IN THE PROCESS OF STOPPING

Explanation

The accelerator server is already stopped or is stopping.

csect-name
The name of the control section that issued the message.

accelerator-name
The name of the accelerator server.

System action

Processing continues.

User response

No action is required.

Severity

0 (informational)

DSNX863I ***csect-name*** **STOP ACCELERATOR INITIATED FOR** ***accelerator-name***

Explanation

The accelerator server is stopping.

csect-name
The name of the control section that issued the message.

accelerator-name
The name of the accelerator server.

System action

New work cannot be directed to this accelerator server until it is restarted.

User response

No action is required.

Severity

0 (informational)

DSNX870I ***csect-name*** **ACCELERATOR** ***accelerator-name*** **IS NOT ONLINE**

Explanation

Accelerator monitoring detected that the accelerator server is no longer online.

csect-name
The name of the control section that issued the message.

accelerator-name
The name of the accelerator server.

System action

New work cannot be directed to this accelerator server until it is online.

User response

No action is required.

Severity

0 (informational)

DSNX871I ***csect-name*** **ACCELERATOR** ***accelerator-name*** **IS ONLINE**

Explanation

Accelerator monitoring detected that the accelerator server is online.

csect-name
The name of the control section that issued the message.

accelerator-name
The name of the accelerator server.

System action

None.

User response

No action is required.

Severity

0 (informational)

DSNX872I ***csect-name*** **ACCELERATOR** ***accelerator-name*** **IN THE PROCESS OF STOPPING**

Explanation

The accelerator server was stopping when the -START ACCEL command was issued.

csect-name
The name of the control section that issued the message.

accelerator-name
The name of the accelerator server.

System action

The -START ACCEL command was not run.

User response

After the accelerator server is stopped, reissue the -START ACCEL command to start the accelerator server.

Severity

0 (informational)

DSNX880I ***csect-name*** **DDF** ***operation*** **FAILED WITH RETURN CODE=***return-code* **AND SQLCODE =** ***sql-code*** **SQLERRMT =** ***sqlca-tokens*** **SQLERRP =** ***sqlerrp*** **SQLERRD =** ***sqlerrd1 sqlerrd2 sqlerrd3 sqlerrd4 sqlerrd5 sqlerrd6*** **SQLWARN 0=***sqlwarn0*, **1=***sqlwarn1*, **2=***sqlwarn2*, **3=***sqlwarn3*,

4=*sqlwarn4*, 5=*sqlwarn5*, 6=*sqlwarn6*, 7=*sqlwarn7*, 8=*sqlwarn8*, 9=*sqlwarn9*, A=*sqlwarna*, SQLSTATE = *sql-state*

Explanation

A distributed data facility (DDF) operation failed.

csect-name
The name of the control section that issued the message.

operation
The name of the DDF operation that failed. Possible values are CONNECT or SNDMON.

return-code
The return code that was reported by DDF.

sql-code
A numeric value that indicates why the SQL statement execution was unsuccessful.

sqlca-tokens
The message tokens from the SQLERRM field of the SQLCA that is returned by DDF.

sqlerrp
The contents of the SQLERRP field of the SQLCA that is returned by DDF.

sqlerrd1, sqlerrd2, sqlerrd3, sqlerrd4, sqlerrd5, sqlerrd6
The contents of the SQLERRD field of the SQLCA that is returned by DDF.

sqlerrd1, sqlerrd2, sqlerrd3, sqlerrd4, sqlerrd5, sqlerrd6
The contents of the SQLERRD field of the SQLCA that is returned by DDF.

sqlwarn0, sqlwarn1, sqlwarn2, sqlwarn3, sqlwarn4, sqlwarn5, sqlwarn6, sqlwarn7, sqlwarn8, sqlwarn9, sqlwarna
The contents of the SQLWARN0, SQLWARN1, SQLWARN2, SQLWARN3, SQLWARN4, SQLWARN5, SQLWARN6, SQLWARN7, SQLWARN8, SQLWARN9, and SQLWARNA fields of the SQLCA that is returned by DDF.

sql-state
The corresponding SQLSTATE for the SQLCODE.

If the *operation* is CONNECT and the *return-code* is 8, the location name in the row that defines the accelerator in the SYSACCEL.SYSACCELERATORS table is incorrectly set to the local Db2 location.

System action

The accelerator server is placed in the STOPERR state. As a result, the accelerator server is not active, and new requests for the accelerator server are rejected.

System programmer response

Refer to the documentation of the SQLCODE that is specified in the message. Use the suggested actions in that documentation to correct the problem. Then issue the -START ACCEL command for the accelerator server.

If the *operation* is CONNECT and the *return-code* is 8, ensure that the LOCATION column of the row that defines the accelerator in SYSACCEL.SYSACCELERATORS is a valid accelerator location name.

User response

Notify the system programmer.

Related reference
Description of SQLCA fields (Db2 SQL)
SYSACCEL.SYSACCELERATORS table (Db2 SQL)

DSNX881I ***csect-name message***

Explanation

An accelerator server returned an alert message.

message
The message that is returned from the accelerator server.

System action

Processing continues.

Operator response

Refer to the product documentation for your accelerator server for more information about the message.

Related information
IBM Db2 Analytics Accelerator for z/OS documentation
DSNX881I message structure

DSNX905I ***csect-name* PROCEDURE OR FUNCTION *name* TERMINATED ABNORMALLY ASID= *asid* WLM_ENV= *wlmenv***

Explanation

A stored procedure terminated abnormally while attempting to satisfy an SQL CALL statement for an SQL application.

name
The name of the stored procedure or function that terminated abnormally.

asid
The MVS ASID of the address space where the stored procedure executed.

wlmenv
The name of the WLM application environment where the stored procedure executed.

System action

The SQL CALL statement fails, and the SQL application is forced to roll back.

System programmer response

Correct the cause of the abnormal termination. If the correction requires the stored procedure to be linkedited again, then it might be necessary to cause the corrected MVS load module to be reloaded.

If it was run in a WLM-established stored procedures address space, issue the MVS VARY WLM,APPLENV=name,REFRESH command.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

DSNX906I ***csect-name*** **PROCEDURE OR FUNCTION** ***name*** **TERMINATED ABNORMALLY. THE PROCEDURE HAS BEEN STOPPED. ASID=** ***asid*** **WLM_ENV=** ***wlmenv***

Explanation

A stored procedure terminated abnormally while attempting to satisfy an SQL CALL statement for an SQL application.

name
The name of the stored procedure or function that terminated abnormally

asid
The MVS ASID of the address space where the stored procedure executed.

wlmenv
The name of the WLM application environment where the stored procedure executed.

System action

The SQL CALL statement fails, and the SQL application is forced to roll back.

The abnormal termination count for procedure *procname* was reached. The procedure is stopped and further requests for the procedure are rejected.

System programmer response

Correct the cause of the abnormal termination. If the correction requires the stored procedure to be linkedited again, then it might be necessary to cause the corrected MVS load module to be reloaded.

If it was run in a WLM-established stored procedures address space, issue the MVS VARY WLM,APPLENV=name,REFRESH command.

After the appropriate command has been issued to refresh the stored procedure load module, use the -START PROCEDURE command to activate the stored procedure.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

DSNX908I ***csect-name*** **PROCEDURE OR FUNCTION** ***name*** **WITH LOAD MODULE** ***module*** **EXCEEDED CPU RESOURCE LIMIT SSN=** ***ssn*** **PROC=** ***jclproc*** **ASID=** ***asid*** **WLM_ENV=** ***wlmenv***

Explanation

A stored procedure or function consumed more CPU service units than allowed by the ASUTIME column of the ALTER PROCEDURES catalog table. The stored procedure might be in a loop.

name
The name of the stored procedure or function being processed

module
The MVS load module associated with the stored procedure

ssn
The name of the Db2 subsystem that called the stored procedure.

jclproc
The name of the JCL PROC used to start this stored procedures address space.

asid
The MVS ASID of the address space where the stored procedure executed.

wlmenv
The name of the WLM application environment where the stored procedure executed.

System action

Db2 detaches the TCB associated with the stored procedure, which causes abnormal termination of the stored procedure.

Operator response

Contact the system programmer.

System programmer response

If the stored procedure is looping, correct the stored procedure.

If the stored procedure is performing correctly, increase the ASUTIME value in the CREATE PROCEDURES row associated with the stored procedure.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

DSNX922I ***csect-name*** **BEGINNING DISCONNECTION OF STORED PROCEDURE ADDRESS SPACES**

Explanation

This message is produced during -STOP DB2 processing. It indicates that Db2 SQL processing has been quiesced, and Db2 is now beginning the termination process for the stored procedures address spaces.

DSNX923I ***csect-name*** **ALL STORED PROCEDURE ADDRESS SPACES ARE NOW DISCONNECTED.**

Explanation

This message is produced during -STOP DB2 processing. It indicates that all of the stored procedure address spaces are now disconnected from Db2 and the stop of Db2 will continue.

WLM-established stored procedure address spaces are terminated by WLM after the disconnection from Db2.

DSNX930I **DB2-MANAGED STORED PROCEDURES ADDRESS SPACE NOT SUPPORTED.**

Explanation

An address space referencing module DSNX9STP was started. In prior releases of Db2, this was the module used to execute Db2-managed stored procedures, which were defined as NO WLM ENVIRONMENT. This function is no longer supported by Db2.

System action

The address space terminates and this message is issued.

System programmer response

Use only WLM-managed stored procedures in V9. Do not attempt to start an address space referencing DSNX9STP.

DSNX940I ***csect-name*** **- DISPLAY PROCEDURE REPORT FOLLOWS-**

Explanation

This message displays output from the DISPLAY PROCEDURE command. The output from this command has the following general structure:

```
DSNX940I csect-name - DISPLAY PROCEDURE REPORT
FOLLOWS-


------ SCHEMA = schema
PROCEDURE  STATUS  ACTIVE  QUED MAXQ  TIMEOUT
FAIL WLM_ENV
procedure  status active  qued  maxq  timeout
fail wlm_env
procedure  status active  qued  maxq  timeout
fail wlm_env
procedure  status active  qued  maxq  timeout
fail wlm_env


------ SCHEMA = schema
csect-name ALL PROCEDURES STARTED FOR THIS
SCHEMA.
PROCEDURE  STATUS  ACTIVE  QUED MAXQ  TIMEOUT
FAIL WLM_ENV
procedure  status active  qued  maxq  timeout
fail wlm_env
procedure  status active  qued  maxq  timeout
fail wlm_env
procedure  status active  qued  maxq  timeout
```

```
fail wlm_env

------ SCHEMA = schema
PROCEDURE  STATUS  ACTIVE  QUED MAXQ  TIMEOUT
FAIL WLM_ENV
procedure  status active  qued  maxq  timeout
fail wlm_env
procedure  status active  qued  maxq  timeout
fail wlm_env
procedure  status active  qued  maxq  timeout
fail wlm_env
csect-name PROCEDURES begin - end STOP (act)
...

csect-name ALL OTHER PROCEDURES IN OTHER
SCHEMAS STOPPED act

csect-name DISPLAY PROCEDURE REPORT COMPLETE
```

The output that is displayed varies depending on the qualifying stored procedures. Error messages might also be included in the output. See "Error messages" on page 1040 for more information.

The following information can be provided in the output:

SCHEMA = *schema*
The schema name for the stored procedures that are included in the output.

The schema name and lines that follow are repeated as many times as needed to satisfy the DISPLAY PROCEDURE request.

PROCEDURE *procedure*
The name of the stored procedure.

One line of output is included for each requested stored procedure.

STATUS *status*
The status of the stored procedure. The status can be any of the following values:

STARTED
The stored procedure can accept SQL CALL requests.

STOPABN
The stored procedure was stopped because of a previous abnormal termination of the stored procedure application. SQL CALL requests for the stored procedure are rejected.

STOPQUE
The stored procedure was stopped. SQL CALL requests for the stored procedure are queued until the stored procedure is started or the timeout interval that is defined by the STORTIME subsystem parameter expires.

STOPREJ
The stored procedure was placed in this status by the STOP PROCEDURE command with the ACTION(REJECT) option. SQL CALL requests for the stored procedure are rejected.

If the stored procedure is in any of the stopped states, you can use the START PROCEDURE command to start the procedure.

ACTIVE *active*
The number of Db2 agents that are currently running this stored procedure.

QUED *qued*
The number of Db2 agents that are currently waiting for this stored procedure to be scheduled.

MAXQ *maxq*
The maximum number of Db2 agents that have waited for this stored procedure to be scheduled since Db2 was started.

TIMEOUT *timeout*
The number of times that an SQL CALL statement timed out while it waited for a stored procedure to be scheduled since Db2 was started.

An SQL CALL statement can time out for any of the following reasons:

- The procedure can be stopped by the STOP PROCEDURE command with the ACTION(QUEUE) option. This specification causes requests for the procedure to time out after the interval that is defined by the STORTIME subsystem parameter is exceeded.
- The Db2 stored procedures address space might not have enough MVS TCBs to handle the volume of SQL CALL statements.
- The MVS dispatching priority of the Db2 stored procedures address space might be too low to process the stored procedure requests in a timely manner.

FAIL *fail*
The number of times that this procedure abended since it was last started.

WLM_ENV *wlm_env*
The MVS Workload Manager environment name for this stored procedure.

csect-name
The name of the control section that issued the message.

ALL PROCEDURES STARTED FOR THIS SCHEMA.
This line is displayed when both of the following conditions are true:

- A STOP PROCEDURE(*.*) command operation was in effect when DISPLAY PROCEDURE was issued.
- All of the procedures are started for the schema that is identified in a preceding line in the output.

PROCEDURES *begin* - *end* STOP (*act*)
This line is displayed when a STOP PROCEDURE command caused a range of procedures to be

stopped. This situation can occur when the STOP PROCEDURE command specifies a partial name with a pattern-matching character (*), for example, `-STOP PROCEDURE(ABC*)` .

begin
The first procedure name in the range of procedures that are currently stopped.

end
The last procedure name in the range of procedures that are currently stopped.

act
The action that was specified on the STOP PROCEDURE command.

ALL OTHER PROCEDURES IN OTHER SCHEMAS STOPPED *act*
This line is displayed when both of the following conditions are true:

- A STOP PROCEDURE(*.*) command operation was in effect when the DISPLAY PROCEDURE command was issued.
- Any procedures that are not already listed in this DISPLAY PROCEDURE output are stopped.

act indicates the action that was specified on the STOP PROCEDURE command.

DISPLAY PROCEDURE REPORT COMPLETE
The report completed successfully.

Error messages

The following messages in the DISPLAY PROCEDURE output indicate that an error occurred:

***csect-name* PROCEDURE HAS NOT BEEN ACCESSED OR IS NOT DEFINED**
The routine name that was supplied on the DISPLAY PROCEDURE command either does not exist or has not been accessed since Db2 started. The specific procedure name might not be present in the SYSIBM.SYSROUTINES catalog table.

Processing continues for any additional routine names that were supplied on the command.

DISPLAY TERMINATED WITH MAX LINES
The DISPLAY PROCEDURE report was truncated. The report was generated in response to a command from an MVS console, and more than 254 messages were generated. Only 254 messages are returned.

Command processing completes. The truncated report is written to the MVS console.

Reissue the DISPLAY PROCEDURE command and specify a smaller number of routines. Specify a list of routines, a schema qualifier, or a partial routine name in the DISPLAY command rather than the default (*.*). Alternatively, reissue the command from the **DB2 Commands** panel of DB2I or from a batch job rather than from the MVS console.

DSNX978I DISPLAY TERMINATED DUE TO INSUFFICIENT MESSAGE SPACE
See "DSNX978I" on page 1048.

DSNX944I *csect-name* THE STORED PROCEDURE FUNCTION IS NOT AVAILABLE
See "DSNX944I" on page 1040.

DSNX994I SCOPE(GROUP) COMMAND CANNOT BE PROCESSED DUE TO COMMAND ALREADY IN PROGRESS
See "DSNX994I" on page 1051.

System action

If no errors occurred, the DISPLAY PROCEDURE command processing continues.

User response

No action is required.

Related reference
-DISPLAY PROCEDURE (Db2) (Db2 Commands)
-START PROCEDURE (Db2) (Db2 Commands)
-STOP PROCEDURE (Db2) (Db2 Commands)
TIMEOUT VALUE field (STORTIME subsystem parameter) (Db2 Installation and Migration)

DSNX944I *csect-name* THE STORED PROCEDURE FUNCTION IS NOT AVAILABLE

Explanation

This message is returned if stored procedure function is invoked when Db2 is started in ACCESS(MAINT) or RESTART LIGHT mode.

System action

If a START, STOP, or DISPLAY PROCEDURE command is in progress, the command terminates.

DSNX946I *csect-name* START PROCEDURE SUCCESSFUL FOR *token*

Explanation

The START PROCEDURE command completed successfully.

token
The procedure name supplied on the START PROCEDURE command.

System action

The START PROCEDURE COMMAND processing continues.

DSNX947I ***csect-name*** **STOP PROCEDURE SUCCESSFUL FOR** ***token***

Explanation

The STOP PROCEDURE command completed successfully.

token
The procedure name supplied on the STOP PROCEDURE command

System action

The STOP PROCEDURE command processing continues.

DSNX951I ***csect-name*** **A STORED PROCEDURE CANNOT ISSUE START/STOP PROCEDURE COMMANDS**

Explanation

A stored procedure attempted to issue the START or STOP PROCEDURE command. This is not allowed because the START and STOP PROCEDURE commands might cause the stored procedures address space tasks to terminate.

System action

The START or STOP PROCEDURE command is rejected.

DSNX957I ***csect-name*** **INSUFFICIENT AUTHORITY FOR OBJECT** ***object***

Explanation

A START, STOP, or DISPLAY command is issued for a stored procedure or user-defined function that the user is not authorized to start, stop, or display.

csect-name
The name of the control section that issued the message.

object
The stored procedure or user-defined function that failed the authorization test.

System action

Processing continues.

System programmer response

If the message is issued at a remote member when SCOPE(GROUP) is specified for the command, verify that the SYSOPR ID is granted the necessary privileges at the remote member.

DSNX960E ***csect-name*** **SOME SQL CALL STATEMENTS CANNOT BE PROCESSED, BECAUSE THE LANGUAGE ENVIRONMENT ROUTINE CEEPIPI CANNOT BE LOADED SSN=** ***ssn*** **PROC=** ***jclproc*** **ASID=** ***asid*** **WLM_ENV=** ***wlmenv***

Explanation

To execute an SQL CALL statement, Db2 must load the Language Environment interface module (CEEPIPI). If the CEEPIPI module is not included in an accessible data set such as STEPLIB data sets, JOBLIB data sets, or the LPA library, Db2 is unable to call Language Environment to process stored procedure or function requests.

ssn
The name of the Db2 subsystem to which the stored procedures address space was connected.

ssn
The name of the JCL PROC used to start this stored procedures address space.

asid
The MVS ASID of the address space where the load was issued.

wlmenv
The name of the WLM application environment where the load was issued.

System action

The address space attempting to process stored procedures or functions terminates.

System programmer response

Change the STEPLIB DD statement in the JCL used to start the stored procedure address space, or install the CEEPIPI module in one of the libraries already accessible to the address space.

After the CEEPIPI module is accessible,restart the failing stored procedure address space. If the error was in a WLM-established stored procedures address space, use the MVS VARY WLM,APPLENV=name,RESUME command.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.

DSNX961I ***csect-name*** **ATTEMPT TO PERFORM OPERATION** ***operation*** **FAILED FOR ROUTINE** ***routine-name*** **SSN=***ssn* **PROC=***jclproc* **ASID=***asid* **CLASS=***class-name* **METHOD=***method-name* **ERROR INFO=***error-information*

Explanation

A WLM-established JAVA stored procedures address space could not perform a necessary operation. The following list contains the possible values for each variable in the message:

operation
The operation that failed. The following list contains the operations that could have failed:

- CallStaticMethod
- CreateDebugJVM
- CreateJavaVM
- DEBUG_ROUTINE
- DestroyJavaVM
- FindClass
- INTERNAL_ERROR
- JDBC Reset

routine-name
The name of the routine that was invoked.

ssn
The name of the Db2 subsystem to which the stored procedures address space is connected.

jclproc
The name of the JCL procedure that was used to start the stored procedures address space.

asid
The ASID of the address space in which *operation* was performed.

class-name
The name of the class that contains the Java method to be invoked.

method-name
The name of the Java method to be invoked.

error-information
The error information provided for this error.

System action

Either the CALL statement fails, or, in the case of operations DEBUG_ROUTINE and CreateDebugJVM, the CALL statement executes but the Java stored procedure cannot be debugged.

System programmer response

Use the value of *operation* and this message's *error-information* to correct the problem. If the WLM-managed stored procedure address space is running with a //JSPDEBUG DD card, then, for further information about this error, check its output (typically, the WLM-managed stored procedure address space output) for information.

Also, check the HFS directory identified as the home directory for the ID associated with the WLM-managed stored procedure address space for any dumps that the JVM could have taken. Check either the `/tmp/java` directory, or if WORK_DIR is specified then its directory, for information that could have been written to file `server_stderr.txt`.

CallStaticMethod
This *operation* indicates that an exception has taken place that was not a Java SQLException.

CreateDebugJVM
This *operation* indicates that the JVM could not be created in debug mode. Debugging of Java stored procedures can only be performed on routines running in a WLM-managed stored procedure address space whose NUMTCB value is 1.

CreateJavaVM
This *operation* indicates that the JVM could not be created. You must have the IBM Developer Kit for OS/390, Java 2 Technology Edition, and the JAVA_HOME environmental variable in your JAVAENV data set must reference its home directory.

DEBUG_ROUTINE
This *operation* indicates that the WLM-managed stored procedure address space could not establish or maintain proper communication with a debug session. This message's *error-information* describes how the operation failed and provides an associated reason code. For all cases except for "ReservePort Failure: NO AVAILABLE PORT" record the information in this message's *error-information* and contact IBM Support for assistance. In the case of "ReservePort Failure: NO AVAILABLE PORT" either wait for the simultaneous debugging activity to decrease or increase the number of ports available to the WLM-managed stored procedure address space.

DestroyJavaVM
This *operation* indicates that the JVM could not be destroyed without error.

FindClass
This *operation* indicates that either a required system-provided class could not be found or an error occurred in accessing a system- or user-provided class. You need to take a specific action based on what type of class could not be found or accessed:

- For a system-provided class, check the settings for JAVA_HOME, and JCC_HOME in the JAVAENV DD statement in the stored procedures address space start-up procedure, and ensure that they are set correctly.
- For a user-provided class, check the settings for TMSUFFIX and CLASSPATH in the JAVAENV DD statement in the stored procedures address space start-up procedure, and check the routine's use of an installed JAR. The JVM run time loads all classes that are referenced in the identified class. Ensure that all referenced, user-provided, classes are in the CLASSPATH or TMSUFFIX, or in a referenced installed JAR.

INTERNAL_ERROR
This *operation* indicates that an internal error has occurred. Record the following information and contact IBM Support for assistance:

- Any information reported in this message's *error-information*
- The results of the recommended checks of the WLM-managed stored procedure address space
- Any dumps that the JVM could have taken
- Any information written to file `server_stderr.txt`

JDBC Reset
This *operation* indicates that a specific internal error has occurred. Record the following information and contact IBM Support for assistance:

- Any information reported in this message's *error-information*
- The results of the recommended checks of the WLM-managed stored procedure address space
- Any dumps that the JVM could have taken
- Any information written to file `server_stderr.txt`

DSNX962I ***csect-name*** **THE Language Environment CEEPIPI SERVICE RETURNED AN UNEXPECTED RETURN CODE** ***rc*** **FOR FUNCTION** ***func*** **SSN=** ***ssn*** **PROC=** ***jclproc*** **ASID=** ***asid*** **WLM_ENV=** ***wlmenv***

Explanation

Db2 uses the Language Environment CEEPIPI service to load and execute user-written stored procedures. The Language Environment return code *rc* was not expected for the indicated Language Environment function call.

rc
The return code received from CEEPIPI.

func
The function requested by Db2. Possible values are:

add_entry
Add an entry to the Language Environment PIPI table dynamically.

call_main
Run a main program stored procedure using an existing Language Environment run time environment.

call_sub
Run a sub program stored procedure using an existing Language Environment run time environment.

delete_entry
Delete an entry from the Language Environment PIPI table dynamically.

end_seq
End a sequence of calls using CEEPIPI.

identify
Identify the language the module was written in.

init_main
Create Language Environment run time environment.

init_sub_dp
Create Language Environment sub run time environment.

term
Terminate the Language Environment run time environment.

start_seq
Start a sequence of calls using CEEPIPI.

ssn
The name of the Db2 subsystem to which the stored procedures address space was connected.

jclproc
The name of the JCL PROC used to start this stored procedures address space.

asid
The MVS ASID of the address space where the CEEPIPI error was encountered.

wlmenv
The name of the WLM application environment where the CEEPIPI error was encountered.

System action

The attempt to run a stored procedure fails. The Db2 stored procedure address space attempts any new stored procedure requests it receives.

System programmer response

The Language Environment return codes from CEEPIPI are documented in *Language Environment for OS/390 & VM Programming Guide*.

If the values of *func* and *rc* are 'ADD_ENTRY' and X'0000000C', the error might be caused by using a compiler that is not Language Environment enabled to create the stored procedure. Db2 stored procedures must be compiled with a compiler that supports Language Environment.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.

DSNX966I ***csect-name*** **STORED PROCEDURE OR FUNCTION** ***sp*** **FAILED. Language Environment ENCLAVE RC =** ***erc*****, FEEDBACK INFORMATION =** ***fi*** **SSN=** ***ssn*** **PROC=** ***jclproc*** **ASID=** ***asid*** **WLM_ENV=** ***wlmenv***

Explanation

Db2 uses the Language Environment CEEPIPI call_main or call_sub service to execute user-written stored procedures or user-defined function. The CEEPIPI interface returned information indicating a failure while executing the stored procedure.

sp
The stored procedure or function name that was called using CEEPIPI.

erc
The Language Environment enclave return code.

fi
Contains one or two message identifiers. The message identifiers are constructed from the Language Environment condition token.

The message identifiers are constructed as follows:

- Single message: Facility_Id combined with Msg_No
- Two messages: Facility_Id combined with Class_Code and Facility_Id combined with Cause_Code

ssn
The name of the Db2 subsystem that called the stored procedure or function.

jclproc
The name of the JCL PROC used to start this stored procedures address space.

asid
The MVS ASID of the address space where the stored procedure executed.

wlmenv
The name of the WLM application environment where the stored procedure executed.

System action

The attempt to run this stored procedure failed. The Db2 stored procedure address space attempts any new stored procedure requests it receives.

System programmer response

A description of the Language Environment enclave return code and the condition token are documented in *Language Environment for OS/390 & VM Programming Guide*. In many cases the feedback information contains a Language Environment message number. These are documented in z/OS Language Environment.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.

DSNX967I ***csect-name*** **ATTEMPT TO PERFORM WLM FUNCTION** ***func*** **FAILED WITH WLM RC=** ***rc*** **RSN=** ***rsn*** **SSN=** ***ssn*** **PROC=** ***jclproc*** **ASID=** ***asid*** **WLM_ENV=** ***wlmenv***

Explanation

A WLM-established stored procedures address space was unable to perform a WLM operation required to communicate with WLM.

func
The WLM function that failed. Possible values are:

- IWMCONN
- IWMSSEL
- IWMSTBGN
- IWMSTEND

ssn
The name of the Db2 subsystem to which this stored procedure address space was connected.

jclproc
The name of the JCL PROC used to start this stored procedures address space.

asid
The MVS ASID of the address space where this function was invoked.

wlmenv
The name of the WLM application environment where this function was invoked.

System action

The stored procedures service task that encountered the error terminates. If this is the last service task in that address space, then that address space terminates.

The WLM return codes and reason codes are documented in *MVS/ESA SP 5.3 Workload Management Services*. In some cases the failures are caused by the WLM application environment being incorrectly defined or in a quiesced state. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

DSNX968I *csect-name* STORED PROCEDURE ADDRESS SPACE IS UNABLE TO CONNECT TO WLM BECAUSE WLM_ENV = *wlmenv* IS STOPPED OR QUIESCED

Explanation

A Db2 stored procedures address space could not connect to the Workload Manager (WLM) services of MVS because the WLM application environment was in a stopped or quiesced state.

wlmenv
The name of the WLM application environment for which the stored procedure address space was being started.

System action

The stored procedures address space terminates.

System programmer response

Correct the WLM application environment name that is being used by stored procedures address space JCL proc.

To change the status of the application environment use the MVS VARY WLM,APPLENV=wlmenv,RESUME command.

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

DSNX973I *csect-name* START FUNCTION SPECIFIC SUCCESSFUL FOR *function-name*

Explanation

The function name that was supplied on the START FUNCTION SPECIFIC command completed successfully.

csect-name
The name of the control section that issued the message.

function-name
The function name that was supplied on the START FUNCTION SPECIFIC command.

System action

The START FUNCTION SPECIFIC command processing continues.

User response

No action is required.

Related reference

-START FUNCTION SPECIFIC (Db2) (Db2 Commands)

DSNX974I *csect-name* STOP FUNCTION SPECIFIC SUCCESSFUL FOR *token*

Explanation

The function name supplied on the STOP FUNCTION SPECIFIC command completed successfully.

token
The function name supplied on the STOP FUNCTION SPECIFIC command.

System action

The STOP FUNCTION SPECIFIC command processing continues.

DSNX975I *csect-name* - DISPLAY FUNCTION SPECIFIC REPORT FOLLOWS-

Explanation

This message displays output from the DISPLAY FUNCTION SPECIFIC command. The output from this command has the following general structure:

```
DSNX975I csect-name - DISPLAY FUNCTION SPECIFIC
REPORT FOLLOWS-

------ SCHEMA = schema
FUNCTION STATUS ACTIVE QUED  MAXQ TIMEOUT FAIL
WLM_ENV
function status active qued maxq timeout fail
wlm_env
function status active qued maxq timeout fail
wlm_env
function status active qued maxq timeout fail
wlm_env


------ SCHEMA = schema
csect-name ALL FUNCTIONS STARTED FOR THIS
SCHEMA.
FUNCTION STATUS ACTIVE QUED  MAXQ TIMEOUT FAIL
WLM_ENV
function status active qued maxq timeout fail
wlm_env
function status active qued maxq timeout fail
wlm_env
function status active qued maxq timeout fail
wlm_env


------ SCHEMA = schema
FUNCTION STATUS ACTIVE QUED  MAXQ TIMEOUT FAIL
WLM_ENV
function status active qued maxq timeout fail
wlm_env
function status active qued maxq timeout fail
wlm_env
function status active qued maxq timeout fail
wlm_env
 FUNCTIONS begin - end STOP (act)
...

csect-name ALL OTHER FUNCTIONS IN OTHER SCHEMAS
STOPPED act
```

```
DISPLAY FUNCTION SPECIFIC REPORT COMPLETE
```

The output that is displayed varies depending on the qualifying external user-defined functions. Error messages might also be included in the output. See “Error messages” on page 1047 for more information.

The following information can be provided in the output:

csect-name
The name of the control section that issued the message.

SCHEMA = *schema*
The schema name for the functions that are included in the output.

The schema name and lines that follow are repeated as many times as needed to satisfy the DISPLAY FUNCTION SPECIFIC request.

FUNCTION *function*
The name of the external function.

One line of output is included for each requested function.

STATUS *status*
The status of the function. The status can be any of the following values:

STARTED
The function can accept SQL statement requests.

STOPABN
The function was stopped because of a previous abnormal termination of the function application. SQL statement requests for the function are rejected.

STOPQUE
The function was stopped. SQL statement requests for the function are queued until the function is started or the timeout interval that is defined by the STORTIME subsystem parameter expires.

STOPREJ
The function was placed in this status by the STOP SPECIFIC FUNCTION command with the ACTION(REJECT) option. SQL statement requests for the function are rejected.

If the function is in any of the stopped states, you can use the START SPECIFIC FUNCTION command to start the function.

ACTIVE *active*
The number of Db2 agents that are currently running this function.

QUED *qued*
The number of Db2 agents that are currently waiting for this function to be scheduled.

MAXQ *maxq*
The maximum number of Db2 agents that have waited for this function to be scheduled since the last START SPECIFIC FUNCTION command was issued for this function.

TIMEOUT *timeout*
The number of times that an SQL statement timed out while waiting for the function to be scheduled since the last START SPECIFIC FUNCTION command was issued for this function.

An SQL statement can time out if the function is stopped by the STOP SPECIFIC FUNCTION command with the ACTION(QUEUE) option. This specification causes requests for the function to time out after the interval that is defined by the STORTIME subsystem parameter is exceeded.

FAIL *fail*
The number of times that this function has abended since it was last started.

WLM_ENV *wlm_env*
The MVS Workload Manager environment name for this function.

ALL FUNCTIONS STARTED FOR THIS SCHEMA.
This line is displayed when both of the following conditions are true:

- A STOP FUNCTION SPECIFIC(*.*) command operation was in effect when DISPLAY FUNCTION SPECIFIC was issued.
- All of the functions are started for the schema that is identified in a preceding line in the output.

FUNCTIONS *begin* - *end* STOP (*act*)
This line is displayed when a STOP SPECIFIC FUNCTION command caused a range of functions to be stopped. This situation can occur when the command was issued with an asterisk (*) in the function name.

begin
The first function name in the range of functions that are currently stopped.

end
The last function name in the range of functions that are currently stopped.

act
The action that was specified on the STOP SPECIFIC FUNCTION command.

ALL OTHER FUNCTIONS IN OTHER SCHEMAS STOPPED *act*
This line is displayed when both of the following conditions are true:

- A STOP FUNCTION SPECIFIC(*.*) command operation was in effect when the DISPLAY FUNCTION SPECIFIC command was issued.
- Any functions that are not already listed in this DISPLAY FUNCTION SPECIFIC output are stopped.

act indicates the action that was specified on the STOP FUNCTION command.

DISPLAY FUNCTION SPECIFIC REPORT COMPLETE
The report completed successfully.

Error messages

The following messages in the DISPLAY FUNCTION SPECIFIC output indicate that an error occurred:

***csect-name* FUNCTION HAS NOT BEEN ACCESSED OR IS NOT DEFINED**
The routine name that was supplied on the DISPLAY FUNCTION SPECIFIC command either does not exist or has not been accessed since Db2 started. The specific function name might not be in the SYSIBM.SYSROUTINES catalog table.

Processing continues for any additional routine names that were supplied on the command.

DISPLAY TERMINATED WITH MAX LINES
The DISPLAY FUNCTION SPECIFIC report was truncated. The report was generated in response to a command from an MVS console, and more than 254 messages were generated. Only 254 messages are returned.

Command processing completes. The truncated report is written to the MVS console.

Reissue the DISPLAY FUNCTION SPECIFIC command and specify a smaller number of routines. Specify a list of routines, a schema qualifier, or a partial routine name in the DISPLAY command rather than the default (*.*). Alternatively, reissue the command from the **DB2 Commands** panel of DB2I or from a batch job rather than from the MVS console.

DSNX994I SCOPE(GROUP) COMMAND CANNOT BE PROCESSED DUE TO COMMAND ALREADY IN PROGRESS
See "DSNX994I" on page 1051.

System action

If no errors occurred, the DISPLAY FUNCTION SPECIFIC command processing continues.

Related reference
-DISPLAY FUNCTION SPECIFIC (Db2) (Db2 Commands)

-START FUNCTION SPECIFIC (Db2) (Db2 Commands)
-STOP FUNCTION SPECIFIC (Db2) (Db2 Commands)
TIMEOUT VALUE field (STORTIME subsystem parameter) (Db2 Installation and Migration)

DSNX978I DISPLAY TERMINATED DUE TO INSUFFICIENT MESSAGE SPACE

Explanation

The DISPLAY PROCEDURE command could not obtain storage for additional messages. This situation occurs for only long display requests, such as one that requests all stored procedures that have been accessed by Db2 applications since Db2 was started.

System action

The display is truncated.

System programmer response

Reissue the DISPLAY PROCEDURE command, and specify a smaller number of procedures. For example, specify a partial procedure name in the DISPLAY PROCEDURE command rather than the default (*).

DSNX980E *csect-name* ATTEMPT TO PERFORM CALL ATTACH FUNCTION *function-name* FAILED WITH Db2 SUBSYSTEM *subsystem-id*. RETURN CODE=*caf-return-code*, REASON CODE=*reason-code*

Explanation

The Db2 stored procedures address space was unable to perform a Db2 call attach operation required to communicate with Db2.

csect-name
The name of the control section that issued the message.

function-name
The Db2 call attach function that failed. Possible values are:

- CONNECT
- OPEN
- CLOSE
- DISCONNECT

subsystem-id
The Db2 subsystem identifier.

caf-return-code
The Db2 call attach return code

reason-code
The Db2 reason code

System action

The stored procedures service task that encountered the error terminates. If this is the last service task in the address space, the Db2 stored procedures address space terminates.

System programmer response

Analyze the Db2 call attach return code and the reason code, and take the appropriate action.

Related tasks
Invoking the call attachment facility (Db2 Application programming and SQL)
Related reference
CAF return codes and reason codes (Db2 Application programming and SQL)

DSNX981E *csect-name* THE PARAMETER *parm* CONTAINS AN INVALID VALUE "*string*" PROC= *jclproc*

Explanation

The Db2 stored procedures address space received an invalid value in the JCL parameter used to start the address space.

parm
The JCL parameter is specified incorrectly. Possible values are:

SUBSYS
This parameter can be invalid for the following reasons:

- The SUBSYS parameter is null.
- The SUBSYS parameter is too long.
- The SUBSYS parameter contained an invalid character.

NUMTCB
This parameter can be invalid for the following reasons:

- A comma was not present in the parameter list to separate the NUMTCB parameter from the previous parameter.
- The NUMTCB parameter is null.
- The NUMTCB parameter contained nonnumeric characters.
- The value of the NUMTCB parameter is zero.
- The value of the NUMTCB parameter is negative.

- The value of the NUMTCB parameter is greater than the maximum number of TCBs allowed in the Db2 stored procedures address space.

APPLENV
This parameter can be invalid for the following reasons:

- A comma was not present in the parameter list to separate the APPLENV parameter from the previous parameter.
- The value of the APPLENV parameter is longer than eighteen characters.

string
The value provided for the parameter in error.

jclproc
The name of the JCL PROC used to start this stored procedures address space.

System action

The Db2 stored procedures address space terminates.

If MVS WLM is used to establish the stored procedure address space, WLM will retry the start of the address space two more times. If all three attempts fail, WLM will quiesce the WLM environment associated with the stored procedure address space.

System programmer response

Correct the JCL parameter used to invoke the Db2 stored procedure address space.

If MVS WLM is used to establish the stored procedure address space, the MVS VARY WLM,APPLENV=*wlmenv*,RESUME command might be required to resume the WLM application environment (*wlmenv*) associated with the stored procedures address space.

DSNX982I ***csect-name*** **ATTEMPT TO PERFORM RRS ATTACH FUNCTION** ***func*** **FAILED WITH RRS ATTACH RC=** ***rc*** **RSN=** ***rsn*** **SSN=** ***ssn*** **PROC =** ***jclproc*** **ASID=** ***asid*** **WLM_ENV=** ***wlmenv***

Explanation

A WLM-established stored procedures address space was unable to perform an RRS attach operation required to communicate with Db2.

func
The RRS attach function that failed. Possible values are:

- SPAS_ID
- SPAS_INIT_SP
- SPAS_TERM_SP

ssn
The name of the Db2 subsystem involved with the RRS attach function.

jclproc
The name of the JCL PROC used to start the stored procedures address space.

asid
The MVS ASID of the address space where the function was attempted.

wlmenv
The name of the WLM application environment where the function was attempted.

System action

The stored procedures service task that encountered the error terminates. If this is the last service task in that address space, then that address space terminates.

System programmer response

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

DSNX983I ***csect-name*** **DB2 STORED PROCEDURE SUPPORT CODE AND SUBSYSTEM CODE ARE NOT AT THE SAME LEVEL SSN=** ***ssn*** **PROC =** ***jclproc***

Explanation

A Db2 stored procedures address space could not connect to the Db2 subsystem. This occurred because the Db2 code in the stored procedures address space was not at the same release level as the code in the Db2 subsystem.

ssn
The name of the Db2 subsystem that the stored procedure address space was attempting to connect with.

jclproc
The name of the JCL PROC used to start the stored procedures address space.

System action

The stored procedures address space terminates.

System programmer response

Correct the Db2 library name in the STEPLIB for the JCL proc for the stored procedures address space. Make the library name the same as the library name used for the Db2 subsystem address spaces. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

DSNX986I **ATTEMPT TO *func* FAILED WITH RV = *rv* RC = *rc* RSN = *rsn* SSN = *ssn* PROC = *jclproc***

Explanation

A WLM-established stored procedures address space was unable to register itself to z/OS UNIX System Services. z/OS UNIX System Services are not available to stored procedures running in the address space.

func
The dub setting used by z/OS UNIX System Services BPX1SDD callable service. This can be DUBPROCESS or DUBTHREAD.

rv
The return value given by z/OS UNIX System Services BPX1SDD callable service.

rc
The return code given by z/OS UNIX System Services BPX1SDD callable service.

rsn
The reason code given by z/OS UNIX System Services BPX1SDD callable service.

ssn
The name of the Db2 subsystem to which this stored procedure address space was connected.

proc
The name of the JCL PROC used to start this stored procedures address space.

System action

The stored procedure address space initialization continues. z/OS UNIX System Services callable services' return values, return codes, and reason codes are documented in *z/OS UNIX System Services Messages and Codes*.

Problem determination

Most failures are due to the user ID associated with the WLM-established stored procedures address space not being RACF defined. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

It is also possible that the number of processes was exceeded for the user ID. If the NUMBER OF TCBS is set too high during install, NUMTCB may exceed the value of the UNIX System Services MACPROCUSER setting. Refer to *z/OS UNIX System Services Messages and Codes* for more information.

DSNX987I ***csect-name* NAME *schema-name* INVALID, COMMAND IGNORED.**

Explanation

The function name or procedure name supplied on the DISPLAY, START, or STOP, FUNCTION SPECIFIC or PROCEDURE command uses a invalid wildcard schema name. The qualified routine name must specify a full schema name, "*", "*.*", or blanks.

schema-name
The schema name containing invalid characters.

System action

The START, STOP, or DISPLAY command is rejected.

DSNX990E ***csect-name* IMS ODBA INITIALIZATION FAILED BECAUSE THE CALLABLE INTERFACE CANNOT BE LOADED**

Explanation

The IMS ODBA callable interface module cannot be loaded. No IMS database DL/I calls will be supported from stored procedures. Ensure the load module named AERTDLI is located within the partitioned data set that is specified in the stored procedure address space startup procedure's DFSRESLB DD card statement.

System action

The stored procedure address space initialization continues.

DSNX991I ***csect-name*** **IMS ODBA INITIALIZATION COMPLETED**

Explanation

The initialization of the IMS ODBA callable interface has completed. Stored procedure applications may use DL/I calls to access IMS databases.

System action

The stored procedure address space initialization continues.

DSNX992E ***csect-name*** **IMS ODBA INITIALIZATION FAILURE, AIB RC =** ***rc***

Explanation

The initialization of the IMS ODBA callable interface has failed. Stored procedure applications cannot use DL/I calls to access IMS databases.

rc
The AIB return code provided by IMS for the CIMS INIT call. For more information regarding the failure, see AIB return and reason codes set by IMS.

System action

The stored procedure address space initialization continues.

DSNX993I ***csect-name*** **CALL TO REXX PROCEDURE** ***execname*** **FAILED, FUNCTION =** ***function*** **RC =** ***rc*** **RSN =** ***rsn***

Explanation

An attempt to establish an environment to run a REXX stored procedure has failed. Use the following pieces of information to identify the error:

execname
The name of the REXX exec.

function
The TSO or REXX function call that failed. It can be one of three values: IKJTSOEV, IRXINIT, or IRXEXEC. For more information regarding the IKJTSOEV function, refer to *z/OS TSO/E Programming Services*. For information regarding IRXINIT and IRXEXEC, refer to *z/OS TSO/E REXX Reference*

rc
The return code for the specific function, provided by TSO or REXX. For return code explanations, refer to *z/OS TSO/E Programming Services* and *z/OS TSO/E REXX Reference*.

reason
The reason code for the specified function, provided by TSO or REXX. For reason code explanations, refer to *z/OS TSO/E Programming Services* and *z/OS TSO/E REXX Reference*.

System action

The stored procedure address space initialization continues.

Problem determination

View the file associated with the SYSTSPRT DD card in the Stored Procedure Address Space start-up procedure. This file contains diagnostic messages issued by TSO regarding the failing function. Refer to *z/OS TSO/E Messages* for any messages found in the SYSTSPRT.

DSNX994I **SCOPE(GROUP) COMMAND CANNOT BE PROCESSED DUE TO COMMAND ALREADY IN PROGRESS**

Explanation

One of the following commands with the SCOPE(GROUP) option was issued at the same time that another data sharing member was processing a SCOPE(GROUP) command:

- DISPLAY PROCEDURE
- START PROCEDURE
- STOP PROCEDURE
- DISPLAY FUNCTION
- START FUNCTION
- STOP FUNCTION

Db2 could not obtain the lock necessary to serialize these commands.

System action

The command is not processed on any members of the data sharing group.

User response

Enter the command again.

Severity

12 (severe error)

Related concepts

Commands in Db2 (Db2 Commands)

Related information

About Db2 and related commands (Db2 Commands)

Chapter 20. DSNY messages

Message identifiers that begin with DSNY communicate information about initialization procedures.

DSNY001I SUBSYSTEM STARTING

Explanation

The -START DB2 command is accepted. This message is issued to the MVS console that issued the -START command. The DSN9022I message is sent when the Db2 subsystem startup process has completed. Refer to the DSN9022I message for additional information.

System action

Db2 startup processing begins.

DSNY002I SUBSYSTEM STOPPING

Explanation

The -STOP DB2 command is accepted. The DSN9022I message is issued when the Db2 subsystem shutdown process has completed. The message is issued either to the origin of the -STOP DB2 command (for MVS MCS console) or to the MVS console from which the -START DB2 command was received. Refer to the DSN9022I message for additional information.

System action

Db2 subsystem shutdown is initiated.

DSNY003I SUBSYSTEM IS ALREADY ACTIVE

Explanation

Either a START DB2 or REFRESH Db2, EARLY command was issued while Db2 is active and was not accepted. These commands are allowed and can be processed correctly only when Db2 is inactive.

The DSN9023I message is issued after this message and contains additional information.

Related reference

-START DB2 (Db2) (Db2 Commands)

-REFRESH DB2,EARLY (Db2) (Db2 Commands)

Related information

DSN9023I

csect-name verb-name pkw-name ABNORMAL COMPLETION

DSNY004I SUBSYSTEM IS ALREADY STOPPING

Explanation

The -STOP DB2 command has not been accepted either because the Db2 subsystem shutdown is in progress for the specified option (QUIESCE or FORCE), or because the QUIESCE option was specified after a FORCE option had been previously accepted. The DSN9023I message is issued after this message. Refer to the DSN9023I message for additional information.

System action

Db2 subsystem shutdown is continued.

DSNY005I SUBSYSTEM STARTUP TERMINATED, INVALID START COMMAND

Explanation

The Db2 subsystem can be started only by a -START DB2 command.

System action

Db2 subsystem startup is terminated.

Operator response

Start the Db2 subsystem via the -START DB2 command, and reenter the rejected command.

DSNY006I *csect-name* INVALID AMODE OR RMODE ATTRIBUTE FOUND FOR LOAD MODULE *module name*

Explanation

The Initialization Procedures subcomponent detected that a module had an invalid AMODE or RMODE attribute when it was loaded. In the error message, 'module name' is the name of the load module with an invalid addressing or residency mode.

System action

Db2 subsystem startup is terminated.

Operator response

Notify the system programmer of the failure.

System programmer response

Verify that all installation and maintenance activities against Db2 were executed using SMP, that the JCLIN

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for SMP includes the correct AMODE and RMODE control statements, and that the Linkage Editor provided with the Data Facility Product (DFP) was invoked by SMP for the link edits. Correct the procedure or JCL that caused the error and rerun the necessary SMP jobs.

Problem determination

A Db2 dump was requested to an MVS SYS1.DUMP data set. The MVS service aid AMBLIST provides Linkage Editor module attributes in the summary section of the LISTLOAD function output.

DSNY007I **LOAD MODULE *module-name* DOES NOT HAVE RMODE(24) ATTRIBUTE**

Explanation

The named load module was not link-edited with the required RMODE(24) attribute.

System action

Db2 startup is abended with reason code 00E80160.

Operator response

Notify the system programmer.

System programmer response

Verify that all installation and maintenance activities against the specified load module were executed using SMP. JCLIN for SMP must have included the correct AMODE and RMODE control statements. The Linkage Editor, provided with the MVS, was invoked by SMP for the link-edits. Correct the procedure or JCL that caused the error and rerun the necessary SMP jobs.

Problem determination

The MVS service aid AMBLIST provides Linkage Editor module attributes in the summary section of the LISTLOAD function output.

DSNY008I **SUBSYSTEM SHUTDOWN REQUEST NOT ACCEPTED**

Explanation

The -STOP DB2 command has not been accepted because a subsystem startup has not completed to the point where shutdown can occur. The DSN9023I message is issued after this message. Refer to the DSN9023I message for additional information.

System action

Db2 startup continues and the -STOP DB2 command is ignored.

User response

Reissue the -STOP DB2 command after subsystem startup has completed.

DSNY009I ***csect-name* SUBSYSTEM STARTING IN LIGHT MODE, NORMAL TERMINATION TO FOLLOW RELEASE OF RETAINED LOCKS IF NO INDOUBTS**

Explanation

Db2 issues this message during Db2 startup if it is restarted in light mode.

System action

Db2 startup continues normally. The Db2 member will automatically shut itself at the end of restart after the retained locks are removed if there are no indoubt units of recovery. If indoubt units of recovery exist, the Db2 member remains up and running in light mode so that the indoubts can be resolved.

DSNY010I **LOAD MODULE module name IS NOT AT THE CORRECT RELEASE/ VERSION LEVEL**

Explanation

The named load module is not at the correct release/ version level for the version of Db2 that was being started.

System action

Db2 startup is abended with reason code 00E80161.

Operator response

Notify the system programmer.

System programmer response

Verify that the correct load libraries are being used. Also verify that the application of maintenance did not result in modules being link edited into the wrong load libraries.

DSNY011I ***csect-name* Z/OS DOES NOT HAVE SUFFICIENT 64-BIT SHARED AND COMMON STORAGE AVAILABLE**

Explanation

Insufficient contiguous shared virtual space or 64-bit common storage remains. For shared virtual space, at least 1 TB of contiguous storage is required for each Db2 member. For 64-bit common storage, 6 GB of contiguous storage is required for each Db2 member.

csect-name
The name of the control section that issued the message.

System action

Db2 startup terminates with reason code 00E8005A.

System programmer response

For each Db2 11 or later Db2 database that you plan to start on each z/OS image, verify that you have the following items:

- A minimum of 1 TB of contiguous shared storage
- 6 GB of contiguous 64-bit common storage

Related information
00E8005A (Db2 Codes)
IEASYSxx (symbol definitions and IEASYSxx members) (MVS Initialization and Tuning Reference)

DSNY012I ***csect-name*** ********** THIS RELEASE OF DB2 REQUIRES Z/OS** ***os-version*** **OR ABOVE**

Explanation
An attempt was made to start a Db2 subsystem on an operating system image that does not meet the minimum version requirement for z/OS.

csect-name
The name of the control section that issued the message.

os-version
The minimum version of z/OS that is required for Db2 11 for z/OS.

System action

Db2 startup abnormally terminates with reason code 00E80058.

System programmer response

Ensure that the required version of z/OS is enabled.

Related concepts
Hardware and software requirements for Db2 (Db2 Installation and Migration)

Related information
00E80058 (Db2 Codes)
Db2 Program Directory

DSNY014I ***n csect*** **DB2 HAS BEEN STARTED WITH ACCESS(MAINT)**

Explanation

This z/OS DFSMS data set encryption has been started with option ACCESS(MAINT).

System action

None.

Programmer response

None.

Severity

0 (informational)

DSNY015I **LIGHT(YES) ON START DB2 COMMAND WAS IGNORED, SYSTEM IS NOT ENABLED FOR DATA SHARING**

Explanation

Db2 issues this message during startup if Db2 is started with the LIGHT(YES) keyword and the system is not enabled for data sharing.

System action

Db2 startup continues normally, ignoring the LIGHT(YES) keyword.

DSNY016I ***csect-name*** **SUBSYSTEM IS STARTING IN LIGHT MODE. NORMAL TERMINATION FOLLOWS RELEASE OF RETAINED LOCKS. INDOUBT UNITS OF RECOVERY ARE IGNORED.**

Explanation

Db2 issues this message during Db2 startup processing if the LIGHT(NOINDOUBTS) option was specified on the START DB2 command.

csect-name
The name of the control section that issued the message.

System action

Db2 startup continues normally. The Db2 member automatically shuts itself down at the end of restart

processing after the retained locks are removed. The Db2 member ignores indoubt units of recovery.

User response

No action is required.

Related concepts

Restart light (Db2 Data Sharing Planning and Administration)

Related reference

-START DB2 (Db2) (Db2 Commands)

DSNY020I ***csect-name*** **MEASURED USAGE DATA IS NOT BEING RECORDED FOR** ***subsystem/address-space***

Explanation

For measured usage data to be recorded, SMF type 89 records must be collected. Two PTFs must be applied: one to the early code and one to the base. Until both are active, measured usage data cannot be recorded.

System action

Processing continues, but measured usage for either the Db2 subsystem or the specified Db2 address space is not recorded.

Programmer response

If measured usage data is needed, be sure that SMF type 89 records are collected and that both PTFs are applied to the running system. An IPL is required for the change to early code.

If the records are being recorded, the PTFs are applied, and an address-space is in the message, then the return code for the MVS service is located in ASCEMULC for that address space.

DSNY024I ***facility*** **INITIALIZATION IS STARTING**

Explanation

The facility that you specified is starting.

facility is MSTR, DBM1, or DIST address spaces.

System action

The facility is starting.

DSNY025I ***facility*** **SHUTDOWN IS COMPLETE**

Explanation

The specified utility has completed shutdown processing.

facility is MSTR, DBM1, or DIST address spaces.

System action

The facility has stopped.

DSNY027I ***csect-name processor-type*** **IS THE MINIMUM LEVEL OF PROCESSOR SUPPORTED BY THIS RELEASE OF DB2**

Explanation

An attempt was made to start a Db2 subsystem on a processor that does not meet the minimum requirement for this release of z/OS DFSMS data set encryption.

csect-name
The name of the control section that issued the message.

processor-type
The minimum processor level that is required by Db2 11 for z/OS.

System action

Db2 startup abnormally terminates with reason code 00E8005C.

System programmer response

Start this z/OS DFSMS data set encryption subsystem on an appropriate processor or start a subsystem that is on previous release of z/OS DFSMS data set encryption on this processor.

Related concepts

Hardware and software requirements for Db2 (Db2 Installation and Migration)

Related information

00E8005C (Db2 Codes)

Db2 Program Directory

DSNY028I ***csect-name*** **DB2** ***version*** **ERLY CODE IS NOT COMPATIBLE WITH THIS RELEASE OF DB2**

Explanation

A Db2 subsystem could not start because the DB2 ERLY code was not at the correct level for the version of that Db2 subsystem.

csect-name
The name of the control section that issued the message.

version
The version of the ERLY code.

System action

Db2 startup abnormally terminates with reason code 00E80163.

System programmer response

To solve the problem, follow these steps:

1. Verify that you are specifying the correct *prefix*.SDSNLINK library in your link list. If not, correct the library name.
2. Install a version of the DB2 ERLY code that is compatible with the Db2 version that you are starting.

   See Choosing link list options (Db2 Installation and Migration) for information about compatibility of ERLY code levels and Db2 versions.
3. Activate the ERLY code by performing a z/OS IPL or issuing the command -REFRESH DB2,EARLY.

Related tasks

Choosing link list options (Db2 Installation and Migration)

Related reference

-REFRESH DB2,EARLY (Db2) (Db2 Commands)

Related information

00E80163 (Db2 Codes)

Chapter 21. DSNZ messages

Message identifiers that begin with DSNZ communicate information about the system parameter manager.

DSNZ002I **src DSNZINIT SUBSYSTEM ssnm SYSTEM PARAMETERS LOAD MODULE NAME IS dsnzparm-name**

Explanation

Db2 subsystem 'ssnm' is being started with the 'dsnzparm-name' DSNZPARM load module. This message is written to the MVS console which entered the -START DB2 command. The message will also appear in the JES SYSLOG and on the JES job log of *ssnm*MSTR. The message contains the name of the DSNZPARM load module entered by the operator or the default name (DSNZPARM) if no name was entered.

System action

Db2 startup processing continues.

DSNZ003I ***csect-name* DSNZINIT CSECT *parm-csect* NOT FOUND IN SYSTEM PARAMETERS.**

Explanation

The named *parm-csect* was not found in the system parameters (ZPARM) specified when starting Db2. This CSECT is required to start Db2. The name of the system parameters load module that is missing this CSECT is identified in previously issued message DSNZ002I.

This error can occur if the system parameters load module specified is for a different release of Db2.

System action

Db2 subsystem startup processing stops.

Operator response

Verify that the correct system parameters name was specified. If the correct name was specified, notify the system programmer.

System programmer response

Verify that:

- The system parameters load module is for the release of Db2 being started.
- The correct load libraries are being used to load the system parameters load module.

If these are correct, then reassemble and relink-edit your system parameters load module.

DSNZ004I ***csect-name* DSNZINIT INCORRECT LEVEL *wrong-level* FOUND IN *parm-csect* SYSTEM PARAMETERS. LEVEL *correct-level* IS REQUIRED.**

Explanation

The system parameters load module CSECT *parm-csect* contains an incorrect level identifier. The CSECT contains a level identifier of *wrong-level* and the Db2 that is starting requires a level identifier of *correct-level*.

This error can occur if the system parameters load module specified is for a different release of Db2. This error can also occur if the system parameters load module is missing some maintenance. In this case the *parm-csect* is down level and must be reassembled.

System action

Db2 subsystem startup processing stops.

Operator response

Verify that the correct system parameters name was specified. If the correct name was specified, then notify the system programmer.

System programmer response

Verify that:

- The system parameters load module is for the release of Db2 being started.
- The correct load libraries are being used to load the system parameters load module.

If these are correct, then reassemble and relink-edit your system parameters load module.

DSNZ006I ***src* SUBSYS *ssnm* SYSTEM PARAMETERS LOAD MODULE NAME *module-name* IS BEING LOADED**

Explanation

Db2 subsystem *ssnm* is loading parameters from *module-name* subsystem parameters load module.

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System action

Db2 online refresh of subsystem parameters continues.

DSNZ007I ***src* SUBSYS *ssnm* SYSTEM PARAMETERS LOAD MODULE NAME *module-name* LOAD COMPLETE**

Explanation

Db2 subsystem *ssnm* has loaded subsystem parameters load module *module-name*, and has notified all resource managers.

DSNZ008I ***src* CSECT *parm-csect* NOT FOUND IN SYSTEM PARAMETERS**

Explanation

The named *parm-csect* was not found in the subsystem parameters load module specified in the -SET SYSPARM command. Message DSNZ007I, which was issued prior to this message, identifies the name of the subsystem parameters load module that is missing this CSECT.

System action

Db2 online refresh of subsystem parameters terminates.

System programmer response

Verify that:

- The system parameters load module matches the release level of the Db2 that was started.
- The correct load libraries are being used to load the system parameters load module.

If these are correct, then reassemble and relink-edit your system parameters load module.

DSNZ009I ***src* INCORRECT LEVEL *wrong-level* FOUND IN *parm-csect* SYSTEM PARAMETERS. LEVEL *correct-level* IS REQUIRED.**

Explanation

This message, issued during -SET SYSPARM command processing, indicates the specified subsystem parameters load module CSECT *parm-csect* contains an incorrect level identifier. The CSECT contains a level identifier of *wrong-level*.

The active Db2 subsystem requires a level identifier of *correct-level*. This error can occur if the specified subsystem parameters load module does not match the release level of the Db2 system. This error can also occur if the subsystem parameters load module requires additional maintenance. In the latter case, the *parm-csect* is down-level and requires reassembly.

System action

Db2 online refresh of subsystem parameters terminates.

DSNZ010I ***src* SUBSYS *ssnm module-type* LOAD MODULE NAME *module-name* NOT FOUND, BLDL R15=*return-code*, R0=*reason-code***

Explanation

During START DB2 or SET SYSPARM command processing on subsystem *ssnm*, the specified subsystem parameters load module *module-name* could not be located during MVS BLDL processing. The BLDL issued a return code of *return-code* and a reason code of *reason-code*.

src
The Db2 command prefix.

ssnm
The subsystem name.

module-name
The name of the module.

return-code
The return code issued by the command.

reason-code
The Db2 reason code.

System action

Db2 startup or online refresh of subsystem parameters terminates.

System programmer response

Verify that the named load module exists, and that Db2 can access it.

Related reference
-START DB2 (Db2) (Db2 Commands)
-SET SYSPARM (Db2) (Db2 Commands)

DSNZ011I **src SUBSYS ssnm SYSTEM PARAMETERS SET TO STARTUP**

Explanation

Db2 issues this message when the STARTUP parameter is specified on the -SET SYSPARM command. The message indicates that the subsystem parameters specified at Db2 startup are now in effect.

System action

Processing continues.

DSNZ012I ***src*** **SUBSYS** ***ssnm*** **SYSTEM PARAMETERS LOAD MODULE NAME** ***module-name*** **NOT LOADED, LOAD R15=*return-code*, R1=*reason-code***

Explanation

Db2 issues this message during START DB2 or SET SYSPARM command processing on subsystem *ssnm*, where the load of *module-name* failed. *return-code* and *reason-code* are the return and reason codes from the MVS LOAD.

src
The Db2 command prefix.

ssnm
The Db2 subsystem name.

module-name
The name of the module.

return-code
The return code issued by the command.

reason-code
The Db2 reason code.

System action

Db2 startup or online refresh of subsystem parameters terminates.

Related reference
-START DB2 (Db2) (Db2 Commands)
-SET SYSPARM (Db2) (Db2 Commands)

DSNZ013I ***src*** **SUBSYS** ***ssnm*** **SYSPARM COMMAND REJECTED, COMMAND ALREADY IN PROGRESS**

Explanation

The current -SET SYSPARM command is rejected due to processing of a previous -SET SYSPARM command.

System action

Online refresh of subsystem parameters for this command is rejected.

User response

Retry the command after the previous -SET SYSPARM command completes.

DSNZ014I ***src*** **PARAMETER** ***parm-name*** **IN CSECT** ***load-csect-name*** **CANNOT BE CHANGED ONLINE. PARAMETER CHANGE IGNORED.**

Explanation

The specified subsystem parameter is different from its start-up value, but the parameter cannot be changed online.

parm-name
The subsystem parameter.

load-csect-name
The CSECT in the subsystem parameter load module that contains the new subsystem parameter value.

System action

Db2 uses the start-up value for specified parameter.

Related reference
Directory of subsystem parameters, panel fields, and application default values (Db2 Installation and Migration)

DSNZ015I ***source*** **YOU MUST HAVE** ***authority*** **AUTHORITY TO CHANGE PARAMETER** ***parameter-name*** **ONLINE. PARAMETER CHANGE IS IGNORED.**

Explanation

The SET SYSPARM command was issued with insufficient authority to change the parameter.

authority
The authority that is required to make the change.

parameter-name
The name of the parameter that SET SYSPARM was supposed to change.

The previous value for *parameter-name* is used.

System action

The value for the *parameter-name* parameter is not changed in the newly-loaded module.

User response

Reissue the command with sufficient authority.

DSNZ016I ***src*** **DSNZINIT SUBSYSTEM** ***ssnm*** **SYSTEM PARAMETERS ARE AS FOLLOWS: SYSTEM PARM** ***zparm-name*** **DSNHDECP** ***decp-name*** **ACCESS CONTROL EXIT** ***access-control-exit-name*** **IDAUT EXIT**

identity-auth-exit-name
SIGNONEXIT ***signon-exit-name***

Explanation

Db2 subsystem *ssnm* is being started with the following parameters specified, either implicitly or explicitly:

zparm-name
The fully qualified data set name where the subsystems parameters were found.

decp-name
The fully qualified data set name where the application programming defaults, commonly called the DECP parameters, were found.

access-control-exit-name
The fully qualified data set name where the Access Control exit was found.

identity-auth-exit-name
The fully qualified data set name where the Identity or Authorization exit was found.

signon-exit-name
The fully qualified data set name where the SIGNON exit was found.

System action

Db2 startup processing continues.

Related reference
-START DB2 (Db2) (Db2 Commands)
-SET SYSPARM (Db2) (Db2 Commands)

DSNZ017I ***src*** **DSNZINIT SUBSYSTEM SYSTEM** ***subsystem-id*** **DATE AND TIME EXITS ARE AS FOLLOWS: ASCII DATE** ***ascii-date-exitname*** **EBCDIC DATE** ***ebcdic-date-exitname*** **UNICODE DATE** ***unicode-date-exitname*** **ASCII TIME** ***ascii-time-exitname*** **EBCDIC TIME** ***ebcdic-time-exitname*** **UNICODE TIME** ***unicode-time-exitname***

Explanation

The Db2 subsystem uses the specified exit modules:

src
The Db2 command prefix.

subsystem-id
The Db2 subsystem identifier.

ascii-date-exitname
The fully-qualified name of the ASCII date exit module DSNXVDTA

ebcdic-date-exitname
The fully-qualified name of the EBCDIC date exit module DSNXVDTX

unicode-date-exitname
The fully-qualified name of the Unicode date exit module DSNXVDTU

ascii-time-exitname
The fully-qualified name of the ASCII time exit module DSNXVTMA

ebcdic-time-exitname
The fully-qualified name of the EBCDIC time exit module DSNXVTMX

unicode-time-exitname
The fully-qualified name of the Unicode time exit module DSNXVTMU

System action

Processing continues.

User response

No action is required.

Related reference
-START DB2 (Db2) (Db2 Commands)
-SET SYSPARM (Db2) (Db2 Commands)

Chapter 22. DSN1 messages

Message identifiers that begin with DSN1 communicate information about service facilities.

These messages apply to DSN1LOGP, DSN1COPY, DSN1COMP, and DSN1PRNT.

The value shown for 'severity' is the value returned as the job-step condition code from the job step in which the message is issued. If additional messages having higher severity values are issued during the same job step, the higher value is reflected as the job-step condition code.

Severity values have the following meanings:

0
An informational message. No error occurred.

4
A warning message. A condition was detected of which the user should be aware. The user might need to take further action.

8
An error message. An error situation was detected and processing could not continue.

12
A severe error message. A severe error situation was detected and processing could not continue.

DSN1110E LIMIT OF 50 STATEMENTS EXCEEDED

Explanation

DSN1LOGP allows a total of 50 statements for a given job.

System action

Processing is terminated.

User response

Resubmit the job using no more than 50 statements.

Severity

8 (error)

DSN1111E LIMIT OF 80 TOKENS EXCEEDED

Explanation

DSN1LOGP allows a total of 80 keywords and corresponding value specifications. A keyword with its value is considered two tokens.

System action

Processing is terminated.

User response

Resubmit the job using no more than 80 keywords.

Severity

8 (error)

DSN1112E TOKEN xx..xx EXCEEDS 64 HEXADECIMAL CHARACTERS

Explanation

The SYSIN input contains the character string 'xx..xx'. This string is invalid.

System action

Processing is terminated.

User response

Resubmit the job with the specified token being no more than 64 hexadecimal characters in length.

Severity

8 (error)

DSN1113E VALUE FOR KEYWORD xxxxxxxx INVALID

Explanation

The SYSIN input contains the keyword 'xxxxxxxx'. The value specified for that keyword is not of the form '(value)'.

System action

Processing is terminated.

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User response

Resubmit the job with the correct form of the keyword. The problem might be that the closing parenthesis ')' is missing or that an extra blank exists in the value.

Severity

8 (error)

DSN1114E RBASTART MULTIPLY DEFINED

Explanation

The RBASTART parameter can be specified only once for a given job.

System action

Processing is terminated.

User response

Resubmit the job using a single RBASTART value.

Severity

8 (error)

DSN1115E *csect-name* KEYWORD *keyword* ALLOWS ONLY *number* HEX CHARACTERS

Explanation

The value given for *keyword* is too long.

System action

Processing is terminated.

User response

Resubmit the job providing no more than the maximum number of characters allowed for the keyword.

Severity

8 (error)

DSN1116E *csect-name keyword* IS USED MORE THAN ONCE.

Explanation

The *keyword* can be used only once in a single job.

System action

Processing is terminated.

User response

Resubmit the job providing a single keyword.

Severity

8 (error)

DSN1117E *csect-name keyword* SPECIFIED WITH NO VALUE OR INCORRECT VALUE

Explanation

The keyword must be followed by a correct value.

System action

Processing is terminated.

User response

Resubmit the job providing a correct value for the keyword.

Severity

8 (error)

DSN1118E RBAEND > 12 HEX CHARACTERS

Explanation

The maximum size of a log RBA in Db2 is 6 bytes (hence, 12 characters).

System action

Processing is terminated.

User response

Resubmit the job providing an RBAEND value that is no more than 12 hexadecimal characters.

Severity

8 (error)

DSN1119E DBID MULTIPLY DEFINED

Explanation

The DBID keyword can be specified only once for a given job.

System action

Processing is terminated.

User response

Resubmit the job providing a single DBID value.

Severity

8 (error)

DSN1120E DBID SPECIFIED WITH NO VALUE

Explanation

The DBID keyword specifies a hexadecimal database identifier and must be followed by a value.

System action

Processing is terminated.

User response

Resubmit the job providing a DBID (value).

Severity

8 (error)

DSN1121E DBID > 4 HEX CHARACTERS

Explanation

A DBID is 2 bytes in length (hence, 4 characters maximum).

System action

Processing is terminated.

User response

Resubmit the job providing a DBID which is no longer than 4 hexadecimal characters.

Severity

8 (error)

DSN1122E OBID MULTIPLY DEFINED

Explanation

The OBID keyword can be specified only once for a given job.

System action

Processing is terminated.

User response

Resubmit the job providing a single OBID value.

Severity

8 (error)

DSN1123E OBID SPECIFIED WITH NO VALUE

Explanation

The OBID keyword specifies a hexadecimal database object identifier. OBID must be followed by a value.

System action

Processing is terminated.

User response

Resubmit the job providing an OBID (value).

Severity

8 (error)

DSN1124E OBID > 4 HEX CHARACTERS

Explanation

An OBID is 2 bytes in length (hence, 4 characters maximum).

System action

Processing is terminated.

User response

Resubmit the job providing an OBID which is no longer than 4 hexadecimal characters.

Severity

8 (error)

DSN1125E PAGE SPECIFIED WITH NO VALUE

Explanation

The PAGE keyword specifies a hexadecimal page number. PAGE must be followed by a value.

System action

Processing is terminated.

User response

Resubmit the job providing a PAGE (value).

Severity

8 (error)

DSN1126E PAGE > 6 HEX CHARACTERS

Explanation

A page number is 3 bytes in length (hence, 6 characters maximum).

System action

Processing is terminated.

User response

Resubmit the job providing a PAGE value which is no longer than 6 hexadecimal characters.

Severity

8 (error)

DSN1127E KEYWORD xxxxxxxx UNKNOWN

Explanation

DSN1LOGP does not recognize the keyword 'xxxxxxxx'.

System action

Processing is terminated.

User response

Check to make sure all keywords are valid and resubmit the job.

Severity

8 (error)

DSN1128E *csect-name keyword* KEYWORD SPECIFIED WITHOUT *keyword*

Explanation

The identified keywords are associated with each other. You cannot specify one keyword without the other keyword.

System action

Processing is terminated.

User response

Resubmit the job providing the corresponding correct keywords.

Severity

8 (error)

DSN1129E PAGE WITHOUT DBID OBID

Explanation

Db2 pages exist in objects called 'page sets'. When you specify a page, you must also identify the page set by using the appropriate DBID and OBID specifications.

System action

Processing is terminated.

User response

Resubmit the job providing the associated DBID (value) and OBID (value) that correspond to the given page.

Severity

8 (error)

DSN1130E OBID WITHOUT DBID

Explanation

When you specify an OBID, you must also identify the database that contains that OBID by specifying the DBID of the database.

System action

Processing is terminated.

User response

Resubmit the job providing both an OBID (value) and a DBID (value).

Severity

8 (error)

DSN1131E OFFSET/VALUE PAIR NUMBER xx CONTAINS INVALID HEX DATA

Explanation

A hexadecimal specification is required. The value for offset/value pair number 'xx' contains an invalid hexadecimal character.

System action

Processing is terminated.

User response

Resubmit the job providing a correct hexadecimal value specification.

Severity

8 (error)

DSN1132E URID SPECIFIED WITH NO VALUE

Explanation

The URID keyword specifies the hexadecimal unit of recovery identifier. URID must be followed by a value.

System action

Processing is terminated.

User response

Resubmit the job providing an associated value for the URID parameter.

Severity

8 (error)

DSN1133E URID > 12 HEX CHARACTERS

Explanation

The maximum size of a URID in Db2 is 6 bytes (hence, 12 characters).

System action

Processing is terminated.

User response

Resubmit the job providing a valid URID value of no more than 12 hexadecimal characters.

Severity

8 (error)

DSN1134E *csect-name* LIMIT OF *number keyword*S IS EXCEEDED

Explanation

The *keyword* was specified more than the maximum number of times allowed in any given job.

System action

Processing is terminated.

User response

Resubmit the job specifying this keyword no more than the maximum number of times.

Severity

8 (error)

DSN1135E SUMMARY MULTIPLY DEFINED

Explanation

The SUMMARY option can be specified only once.

System action

Processing is terminated.

User response

Resubmit the job using a single SUMMARY specification.

Severity

8 (error)

DSN1136E SUMMARY SPECIFIED WITH NO VALUE OR INCORRECT VALUE

Explanation

The permitted values for summary are YES, NO, ONLY, or FILTER.

System action

Processing is terminated.

User response

Resubmit the job providing a valid parameter for the SUMMARY option.

Severity

8 (error)

DSN1137I *csect-name* FIRST PAGE SET CONTROL RECORD AFTER RESTART LOG *seq nnnnnnnnnnn*

Explanation

This message shows the log sequence number of a record that serves as an implicit indication that a restart occurred just prior to this point.

seq
RBA or LRSN

nnnnnnnnnnn
The log sequence number

System action

Processing continues.

Severity

0 (informational)

DSN1138E ***csect-name keyword* AND *keyword* CANNOT BOTH BE SPECIFIED**

Explanation

You cannot specify both keywords in one job.

System action

Processing is terminated.

User response

Resubmit the job specifying only one of the keywords.

Severity

8 (error)

DSN1139E **RID SPECIFIED WITH NO VALUE**

Explanation

The RID keyword specifies a 4-byte hexadecimal number, with the first 3 bytes representing the page number and the last byte representing the record ID. A value must be associated with the RID.

System action

Processing is terminated.

User response

Resubmit the job providing a RID (value).

Severity

8 (error)

DSN1140E **RID > 8 HEX CHARACTERS**

Explanation

The maximum size of a RID in Db2 is 4 bytes (hence, 8 characters).

System action

Processing is terminated.

User response

Resubmit the job providing a valid RID value of no more than 8 hexadecimal characters.

Severity

8 (error)

DSN1141E **RID WITHOUT DBID OBID**

Explanation

The DBID and OBID associated with the given RID value must be specified.

System action

Processing is terminated.

User response

Resubmit the job providing the associated DBID (value) and OBID (value) that correspond to the given RID value.

Severity

8 (error)

DSN1142E **DATAONLY MULTIPLY DEFINED**

Explanation

The DATAONLY option limits the log records extracted in the detail report to those that represent data modifications. This option can be specified only once.

System action

Processing is terminated.

User response

Resubmit the job specifying DATAONLY once.

Severity

8 (error)

DSN1143E **DATAONLY SPECIFIED WITH NO VALUE OR INCORRECT VALUE**

Explanation

The DATAONLY keyword must be specified with either a YES or NO value. Any other value (including no value) is incorrect.

System action

Processing is terminated.

User response

Resubmit the job specifying the correct value for the DATAONLY parameter.

Severity

8 (error)

DSN1144E RBASTART SPECIFIED WITH NO VALUE

Explanation

The RBASTART keyword specifies the hexadecimal log RBA from which to begin extraction. RBASTART must be followed by a value.

System action

Processing is terminated.

User response

Resubmit the job providing an associated value for the RBASTART parameter.

Severity

8 (error)

DSN1146E CURRENT END CHECKPOINT TIMESTAMP TIMESTAMP=yy.ddd hh.mm.ss LOG RBA=xxxxxx IS OUT OF SEQUENCE. THE GREATEST TIMESTAMP SEEN SO FAR IS TIMESTAMP=yy.ddd hh.mm.ss LOG RBA=xxxxxx Multiple processors may be writing to the same log.

Explanation

This message indicates that the current log record has a timestamp that is less than the previous timestamp processed. This may be a potential problem.

System action

Processing continues.

User response

Examine current log to determine whether multiple processors are writing to the same log. (Data may be being overwritten.) This may lead to data inconsistencies.

Severity

4 (warning)

DSN1147E SYSCOPY MULTIPLY DEFINED

Explanation

The SYSCOPY option can only be specified once.

System action

Processing is terminated.

System programmer response

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

User response

Resubmit the job using a single SYSCOPY specification.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

Severity

8

DSN1148E SYSCOPY SPECIFIED WITH NO VALUE OR INCORRECT VALUE

Explanation

The SYSCOPY keyword must be specified with either a YES or NO value. Any other value (including no value) is incorrect.

System action

Processing is terminated.

System programmer response

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

User response

Resubmit the job specifying the correct value for the SYSCOPY parameter.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

Severity

8

DSN1150I SUMMARY OF COMPLETED EVENTS

Explanation

This message heads the summary of completed units of recovery (URs) and checkpoints. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

System action

Processing continues.

Severity

0 (informational)

DSN1151I *csect-name mbn* UR CONNID=*cc* CORRID=*bb* AUTHID=*aa* PLAN=*pp* START DATE=*yy.ddd* TIME=*hh:mm:ss* DISP=*xx* INFO=*ii* STARTRBA=*ss* ENDRBA=*ee* STARTLRSN=*rr* ENDLRSN=*nn* NID=*nid* LUWID=*luwid* COORDINATOR=*name* PARTICIPANTS: (*list of participants*)

Explanation

This message describes a unit of recovery (UR) that terminated for data sharing member *mbn*.

mbn
MEMBER=*membername*, where *membername* is the member of a data sharing group. This is printed only for a data sharing record.

cc
Connection ID (for example, BATCH).

bb
Correlation ID (for example, JOB xxx).

aa
Authorization ID executing the UR.

pp
Plan name used by the UR.

DSN1LOGP returns a plan name of SYSTEM in this field if the UR was generated as a result of a system event (such as the first update of a table space). In such a case, no bound plan exists for the UR described.

yy.ddd
Starting date of the UR.

hh:mm:ss
Starting time of the UR.

xx
Disposition of the UR. Values reported are:

- Inflight
- In-abort
- In-commit
- Indoubt
- Committed
- Aborted
- P-Abort

If the UR was bypassed by a conditional restart, DSN1LOGP indicates this by preceding the disposition value with the word BYPASSED.

ii
The status of the data is one of the following:

- COMPLETE, indicating that all page sets modified by this UR were identified.
- PARTIAL, indicating that the list of page sets modified by this UR is incomplete. DSN1LOGP indicates PARTIAL status if all records associated with a UR are not available, and no checkpoint is found before the UR's completion.

ss
RBA of the first log record associated with the UR (that is, the URID).

ee
RBA of the last log record associated with the UR.

rr
LRSN of the first log record associated with the UR.

nn
LRSN of the last log record associated with the UR

nid
The identifier assigned by IMS or CICS for this UR. This is blank if the UR is a result of TSO, batch, or remote access.

luwid
The logical unit of work identifier associated with the UR

name
The name of the remote coordinator associated with the UR. This is blank if the coordinator is the local Db2, IMS, or CICS.

list of participants
The names of all remote participants that might have updated data in this UR.

This message is followed by messages that identify the page sets modified by the UR. For each page set, a single message is printed in the following form:

```
DATABASE=dbid=dbname
PAGE SET=obid=psname
```

Where:

dbid
Internal database identifier

dbname
Database name corresponding to the *dbid*

obid
Internal page set identifier

psname
Page set name corresponding to the OBID

The *dbname* and *psname* fields might be absent if a full checkpoint was unavailable to DSN1LOGP or was caused by overlapped processing of Db2 during a checkpoint.

If no data was modified by the UR (for example, certain URs might be created merely to track information that is valid only for the life of the application), the phrase NO DATA MODIFIED is printed.

System action

Processing continues.

Severity

0 (informational)

DSN1152I ***csect-name mbn* UR CONNID=** CORRID=** AUTHID=** PLAN=** START DATE=** TIME=** DISP=*xx* INFO=*ii* STARTRBA=*ss* STARTLRSN=** ENDRBA=*ee* ENDLRSN=*nn*NID=*nid* LUWID=*luwid* COORDINATOR=*name* PARTICIPANTS: (*list of participants*)**

Explanation

This message describes a unit of recovery (UR) for data sharing member *mbn*. The UR identifying information (**) described in message DSN1151I is unavailable.

mbn
MEMBER=*membername*, where *membername* is the member of a data sharing group. This is printed only for a data sharing record.

The remaining information (DISP, INFO, START, END, NID, LUWID, COORDINATOR and PARTICIPANTS) appears just as it does in message DSN1151I. If the UR did not complete, the END RBA or LRSN values are not printed.

This message is followed by messages that identify the page sets modified by the UR. Details of that are in the explanation of message DSN1151I.

System action

Processing continues.

Severity

0 (informational)

DSN1153I ***csect-name* CHECKPOINT *mbn* STARTRBA=*ss* ENDRBA=*ee* STARTLRSN=*rr* ENDLRSN=*nn* DATE=*yy.ddd* TIME=*hh:mm:ss***

Explanation

This message describes a complete checkpoint on the log starting and ending RBA or LRSN for data sharing member *mbn*. If the information is available, DSN1LOGP also returns the date and time that the checkpoint started.

When this message follows message DSN1157I RESTART SUMMARY, it identifies the checkpoint that would be used at restart. If no checkpoint is available, message DSN1158I is printed instead.

mbn
MEMBER=*membername*, where *membername* is the member of a data sharing group. This is printed only for a data sharing record.

System action

Processing continues.

Severity

0 (informational)

DSN1154I ***csect-name* RESTART *mbn* AT RBA=*xx* LRSN=*ll* DATE=*yy.ddd* TIME=*hh:mm:ss***

Explanation

A normal restart occurred at log RBA *xx* or LRSN *ll*.

mbn
MEMBER=*membername*, where *membername* is the member of a data sharing group. This is printed only for a data sharing record.

DSN1LOGP also returns the date and time of that restart.

System action

Processing continues.

Severity

0 (informational)

DSN1155I ***csect-name*** **CONDITIONAL RESTART** ***mbn*** **AT RBA=*xx* LRSN=*ll* DATE=*yy.ddd* TIME=*hh:mm:ss* STARTRBA=*ss* ENDRBA=*ee* FORWARD=*ff* BACKOUT=*bb***

Explanation

A conditional restart occurred at the log RBA *xx* and LRSN *ll*. DSN1LOGP also returns the date and time of that restart.

mbn
MEMBER=*membername*, where *membername* is the member of a data sharing group. This is printed only for a data sharing record.

ss
Relative byte address of the beginning of the restart

ee
Relative byte address of the conclusion of the restart

ff
Whether forward log recovery phase was to be bypassed (YES | NO)

bb
Whether backward log recovery phase was to be bypassed (YES | NO)

System action

Processing continues.

Severity

0 (informational)

DSN1156I ALL URS COMPLETE

Explanation

There are no URs outstanding for restart.

System action

Processing continues.

Severity

0 (informational)

DSN1157I RESTART SUMMARY

Explanation

This message heads the summary of the description of work to be performed at restart. Restart information that follows is based on the scope of the log scanned. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

System action

Processing continues.

Severity

0 (informational)

DSN1158I NO CHECKPOINT AVAILABLE — RESTART SUMMARY INCOMPLETE

Explanation

No checkpoint is available within the scope of the log scanned. The information following this message includes:

- URs that have not completed
- Page sets modified by these URs
- Page sets with writes pending.

The information cannot be considered complete.

System action

Processing continues.

Severity

0 (informational)

DSN1159I NO DATABASE WRITES PENDING

Explanation

All database I/O has been completed. If the Log Extractor can find no complete checkpoint, it will return an additional message '(BASED ON

INCOMPLETE LOG INFORMATION)', to warn you that there may in fact be pending database writes.

System action

Processing continues.

Severity

0 (informational)

DSN1160I DATABASE WRITES PENDING:

Explanation

Database writes are pending at restart. Each page set with outstanding I/O is identified by a separate message following this one:

DATABASE=dbid=dbname
PAGESET=obid=psname START=ss

Where:

dbid
Internal database identifier

dbname
Database name corresponding to the dbid

obid
Internal page set identifier

psname
Page set name corresponding to the obid

Note: *dbname* and *psname* may be absent if a full checkpoint was unavailable to the Log Extractor or was caused by overlapped processing of Db2 during a checkpoint.

ss
Log RBA of the earliest log record required to complete outstanding writes for this page set. If the value of ss is returned as **, this information is unavailable. Such will be the case if the Log Extractor is unable to locate a full checkpoint. In this event, DSN1LOGP will return an additional message (LIST MAY BE INCOMPLETE), to alert you to the possibility that the list of page sets with outstanding writes may be incomplete.

System action

Processing continues.

Severity

0 (informational)

DSN1162I *csect-name mbn*UR CONNID=*cc* CORRID=*bb* AUTHID=*aa* PLAN=*pp* START DATE=*yy.ddd* TIME=*hh:mm:ss* DISP=*xx* INFO=*ii* STARTRBA=*ss* STARTLRSN=*ll* NID=*nid*LUWID=*luwid* COORDINATOR=*name* PARTICIPANTS: (*list of participants*)

Explanation

This message describes a unit of recovery (UR) that has not terminated. The information returned is the same as for message DSN1151I, except that the END field is not included in the message because the UR did not terminate.

mbn
MEMBER=*membername*, where *membername* is the member of a data sharing group. This is printed only for a data sharing record.

System action

Processing continues.

Severity

0 (informational)

DSN1163E NO CHECKPOINT AVAILABLE DUE TO LOG ERROR -- RESTART SUMMARY INCOMPLETE

Explanation

A log error was encountered. DSN1LOGP marked any checkpoints encountered before the log error as invalid. There were no complete checkpoints following the log error in the specified log range. The information following this message includes:

- URs that have not completed
- Page set modified by these URs
- Page sets with writes pending.

This information cannot be considered complete.

System action

Processing continues.

Severity

0 (informational)

DSN1164E INVALID xxxx FOUND AT RBA = yyyyyyyyyyy

Explanation

While processing the SUMMARY option, an invalid checkpoint record (either URE or RURE identified by 'xxxx') was encountered in the log.

System action

Processing continues.

User response

If the checkpoint record identified in the message is used to restart Db2, the restart will fail because Db2 will not be able to process the unit of recovery presented by the invalid URE or RURE. Db2 must be restarted from a previous checkpoint to correctly process all units of recovery. The print log map (DSNJU004) utility can be used to list the checkpoint records in the BSDS, and the CHKPTRBA parameter of the change log inventory (DSNJU003) utility can be used to direct the Db2 restart to use a particular checkpoint.

Severity

0 (informational)

DSN1170E SUBTYPE MULTIPLY DEFINED

Explanation

The SUBTYPE parameter can be specified only once for any given job.

System action

Processing terminates.

User response

Provide a single SUBTYPE value and resubmit the job.

Severity

12 (severe error)

DSN1171E SUBTYPE SPECIFIED WITH NO VALUE

Explanation

The SUBTYPE parameter specifies a decimal set subtype. The SUBTYPE must be followed by a value, i.e. SUBTYPE(value).

System action

Processing terminates.

User response

Provide a SUBTYPE value and resubmit the job.

Severity

12 (severe error)

DSN1172E SUBTYPE > 2 DECIMAL CHARACTERS

Explanation

The maximum size of a SUBTYPE is 2 decimal characters.

System action

Processing terminates.

User response

Provide a SUBTYPE value with a maximum of 2 decimal characters and resubmit the job.

Severity

12 (severe error)

DSN1173E *csect-name* INVALID VALUE *invalid-value* SPECIFIED FOR KEYWORD *keyword-name*

Explanation

The specified keyword value is not valid.

csect-name
The name of the control section that issued the message.

invalid-value
The invalid value.

keyword-name
The keyword that contained an invalid value.

System action

Processing terminates.

User response

Provide a valid value and resubmit the job.

Severity

12 (severe error)

Related concepts
Db2 online utilities (Db2 Utilities)
Db2 stand-alone utilities (Db2 Utilities)

DSN1174E OFFSET SPECIFIED WITH NO SUBTYPE

Explanation

The given OFFSET has no corresponding SUBTYPE.

System action

Processing terminates.

User response

Provide a valid SUBTYPE for the given OFFSET and resubmit the job.

Severity

12 (severe error)

DSN1175E OFFSET SPECIFIED WITH NO VALUE OR INCORRECT VALUE

Explanation

The given OFFSET has no corresponding VALUE given or an incorrect VALUE is specified, such as specifying another keyword in place of a value.

System action

Processing terminates.

User response

Provide a valid VALUE for the given OFFSET and resubmit the job.

Severity

12 (severe error)

DSN1176E OFFSET > 8 HEX CHARACTERS

Explanation

The maximum size for an OFFSET is 4 bytes (hence, 8 characters).

System action

Processing terminates.

User response

Provide an OFFSET with a maximum of 8 characters and resubmit the job.

Severity

12 (severe error)

DSN1177E LIMIT OF 10 OFFSET, VALUE PAIRS EXCEEDED

Explanation

A maximum of 10 OFFSET, VALUE pairs can be specified for a given log record SUBTYPE.

System action

Processing terminates.

User response

Provide a maximum of 10 OFFSET, VALUE pairs for a given SUBTYPE and resubmit the job.

Severity

12 (severe error)

DSN1178E OFFSET SPECIFIED WITH NO CORRESPONDING VALUE

Explanation

The given OFFSET has no corresponding VALUE keyword specified.

System action

Processing terminates.

User response

Provide an associated VALUE (value) for the given OFFSET and resubmit the job.

Severity

12 (severe error)

DSN1179E VALUE SPECIFIED WITH NO CORRESPONDING OFFSET OR SUBTYPE PARAMETER

Explanation

The given VALUE has either no corresponding OFFSET or SUBTYPE parameter specified.

System action

Processing terminates.

User response

Provide an associated OFFSET or SUBTYPE for the given VALUE and resubmit the job.

Severity

12 (severe error)

DSN1180E VALUE SPECIFIED WITH NO VALUE OR INCORRECT VALUE

Explanation

The given VALUE has no corresponding value given, an incorrect value is specified, such as specifying a keyword in place of a value, or an uneven number of characters were specified.

System action

Processing terminates.

User response

Provide a valid value for the given VALUE and resubmit the job.

Severity

12 (severe error)

DSN1181E VALUE SPECIFIED WITH NO CORRESPONDING OFFSET

Explanation

The given VALUE has no corresponding OFFSET specified.

System action

Processing terminates.

User response

Provide a valid OFFSET for the given VALUE and resubmit the job.

Severity

12 (severe error)

DSN1182E LIMIT OF 10 LUWIDs EXCEEDED

Explanation

A maximum of 10 LUWID keywords can be specified in any given job.

System action

DSN1LOGP processing is terminated.

User response

Resubmit the job providing no more than 10 LUWID keywords.

Severity

8 (error)

DSN1183E LUWID SPECIFIED WITH INCORRECT VALUE OR NO VALUE

Explanation

The LUWID consists of an LU network name, an LUW instance number, and a commit sequence number. The LU network name consists of a 1 to 8 character network ID, a period, and a 1 to 8 character network LU name. The LUW instance number consists of a period followed by 12 hexadecimal characters. The LUW sequence number consists of a period followed by 4 hexadecimal characters.

System action

DSN1LOGP processing is terminated.

User response

Resubmit the job providing a valid LUWID value.

Severity

8 (error)

DSN1184E FILTER KEYWORD MULTIPLY DEFINED

Explanation

The FILTER keyword was specified more than once.

System action

DSN1LOGP processing is terminated.

User response

Correct the input to provide only one FILTER keyword and resubmit the job.

Severity

8 (error)

DSN1185E FILTER KEYWORD SPECIFIED WITHOUT SUMMARY KEYWORD

Explanation

The FILTER keyword was specified without an associated SUMMARY keyword.

System action

DSN1LOGP processing is terminated.

User response

Correct the input to include the SUMMARY keyword and resubmit the job.

Severity

8 (error)

DSN1186E ***csect-name* KEYWORD *keyword* MUST EITHER INPUT 12 OR 20 CHARACTERS**

Explanation

LRSN values with the specified *keyword* must be a value of 12 characters or 20 characters in length.

System action

Processing terminates.

User response

Correct the input on the control statement for the specified keyword and resubmit the job.

Severity

8 (error)

DSN1187E ***csect-name* VALUES FOR KEYWORDS *keyword-1* AND *keyword-2* MUST BE THE SAME LENGTH**

Explanation

The DSN1LOGP stand-alone utility issues this message when a pair of keywords do not have the same input length. LRSN values for the specified keyword must be of the same format. The input values must either specify a 6-byte log format (12 characters) or a 10-byte log format (20 characters).

System action

Processing terminates.

User response

Correct the input on the control statement for the specified keyword and resubmit the job.

Severity

8 (error)

DSN1196I ***database spacenam dbid obid #pg-regressions***

Explanation

This message contains the following summary information about page regression errors:

database
The name of the database that has page regression. An asterisk would be printed if the name is unknown.

spacenam
The name of the pageset that has page regression. An asterisk would be printed if the pageset name is unknown.

dbid
Hexadecimal DBID of the pageset that has page regression.

obid
Hexadecimal OBID of the database that has page regression.

 # pg-regressions
The total number of regressed pages for the pageset.

DSN1197I **TOTAL NUMBER OF PAGES CHECKED FOR REGRESSION = *page-count***

Explanation

This message lists the total number of unique pages that DSN1LOGP has checked for page regression errors. *page-count* is displayed in decimal format.

DSN1198I ********NO REGRESSED PAGES DETECTED********

Explanation

No page regression errors were detected within the RBA/LRSN range that was specified.

DSN1210E **DSNJSLR ERROR RETCODE=*reason-code* REASON CODE =*return-code***

Explanation

The stand-alone log read function detected an error.

reason-code
The Db2 reason code value that indicates the reason for the failure. For explanations of reason codes, see Db2 reason codes (Db2 Codes).

return-code
A numeric value that indicates the reason for the failure.

System action

Processing is terminated.

Severity

8 (error)

Related tasks

Reading log records with OPEN, GET, and CLOSE (Db2 Administration Guide)

Related reference

Registers and return codes (Db2 Administration Guide)

DSN1211E DSNJSLR RETURNED BAD LOG RBA

Explanation

One of the three problems listed below exists.

1. The recovery log data set is damaged.
2. You identified a data set that isn't a recovery log data set.
3. The stand-alone log read service has a problem.

System action

Processing continues.

User response

Determine if the problem is your error by dumping the data set and determining if it is a log data set.

Problem determination

A common error is to specify the first data set on an archive tape (the 'Bxxxxxxx' data set) as a log data set; it is actually a BSDS.

Severity

0 (informational)

DSN1212I *csect-name* FIRST LOG *seq* ENCOUNTERED *nnnnnnnnnnn*

Explanation

This message identifies the sequence number of the first log record that was read.

seq
RBA or LRSN

System action

Processing continues.

Severity

0 (informational)

DSN1213I *csect-name* LAST LOG *seq* ENCOUNTERED *nnnnnnnnnnn*

Explanation

This message identifies the sequence number of the last log record that was read.

seq
RBA or LRSN

System action

Processing continues.

Severity

0 (informational)

DSN1214I NUMBER OF LOG RECORDS READ nnnnnnnnnnnnnnn

Explanation

This identifies the number (in decimal) of 'logical' log records read during DSN1LOGP processing.

System action

Processing continues.

Severity

0 (informational)

DSN1215I NO LOG RECORDS WERE READ

Explanation

DSN1LOGP read no log records.

System action

Processing continues. Possible explanations:

- An error prevents DSN1LOGP from continuing, so no log records have yet been processed. If this is the case, an error message should precede this message.
- You specified the active log data sets or archive log data sets out of RBA sequence.
- You specified a STARTRBA that is greater than any RBA in the active and/or archive data sets available.

Severity

0 (informational)

DSN1216E *csect-name* DSNJSLR ERROR RETCODE = *xxxxxxxx* REASON

CODE = *yyyyyyyy seq* = *nnnnnnnnnnnn*

Explanation

The stand-alone log read function returned an error indicating that either the log has an error in one of the control intervals (CI) or a data set containing the requested sequence number cannot be located. The sequence number shown in the message indicates where the error was detected.

seq
RBA or LRSN

The sequence number points:

- To the start of the CI, if there is a problem with the log control interval definition (LCID), or with any of the general control information within a CI.
- To the log record in the CI, if there is a problem with a log record header (LRH).

If this is the first log record read during this execution of DSN1LOGP, and if there is a problem with the LCID, the sequence number is all zeros.

Before returning any records, DSN1LOGP checks the control information (LCID) at the end of a CI, and analyzes the LRH to ensure that all records are properly chained together within the CI. If an error is detected while performing this process, DSN1LOGP issues this message before dumping the entire CI. It will not format individual records within the CI, but will, if possible, continue processing by reading the next CI.

System action

Processing continues.

Severity

0 (informational)

Related concepts
Db2 reason codes (Db2 Codes)
Related tasks
Reading log records with OPEN, GET, and CLOSE (Db2 Administration Guide)
Related reference
Registers and return codes (Db2 Administration Guide)
DSN1LOGP (Db2 Utilities)

DSN1217E ***csect-name mbn* DSNJSLR WARNING RETCODE = *xxxxxxxx* REASON CODE = *yyyyyyyy* CURRENT LOG *seq* = *nnnnnnnnnnnn***

Explanation

A gap in the log sequence range was encountered for member *mba*. The CURRENT LOG sequence number shows the log record for the member following the gap, and is formatted following this message.

Previous log record can be found with same member ID.

mbn
MEMBER=*membername*, where *membername* is the member of a data sharing group. This is printed only for a data sharing record.

seq
RBA or LRSN

System action

Processing continues.

Severity

0 (informational)

Related concepts
Db2 reason codes (Db2 Codes)
Related tasks
Reading log records with OPEN, GET, and CLOSE (Db2 Administration Guide)
Related reference
Registers and return codes (Db2 Administration Guide)

DSN1218I **NUMBER OF LOG ERROR MESSAGES nnnnnnnnnnnnnnn**

Explanation

DSN1LOGP distinguishes three classes of errors:

1. Code problems existing in the Db2 or system code used for DSN1LOGP. In the event of a SYSABEND dump, a user abend code of U0153 will be issued, and DSN1LOGP will be terminated.
2. Incorrect invocation of DSN1LOGP caused, perhaps, by your having used an incorrect keyword or missed a DD statement. Under these circumstances, DSN1LOGP will issue appropriate error messages, and the program will be terminated.
3. Failure by a given log CI under the scrutiny of DSN1LOGP. Such scrutiny is performed before any of the records within the CI are processed. Failure is an indication of logical damage, and error messages are issued by the Log Extractor. The CI or failing log record is printed, and DSN1LOGP continues to the next CI or log record.

The count 'nnnnnnnnnnnnnnnn' provided summarizes the number (in decimal) of errors DSN1LOGP detected while accessing the log.

System action

Processing continues.

Severity

0 (informational)

DSN1219E **SYSSUMRY DD STATEMENT MISSING**

Explanation

You requested the SUMMARY option, but failed to include the SYSSUMRY DD statement in your JCL invocation.

System action

Processing terminates.

User response

Resubmit the job with a SYSSUMRY DD statement included in the JCL invocation.

Severity

8 (error)

DSN1220E **ARCHIVE LOG TRUNCATED AT xxxxxxxx - INVALID LOG RECORDS WERE READ**

Explanation

At a restart of Db2, an archive log was truncated. This archive log data set could not be physically altered to reflect this truncation, and invalid log records therefore still exist. DSN1LOGP has already reported this information in the summary report, and cannot retract it. Nor can it disregard the invalid log information already read in order adequately to summarize what has occurred. Therefore, all information up to this point in the log will be summarized, and a new summary report initiated. Consequently, the same UR may be reported twice with different dispositions and different page sets modified. To avoid this condition, use the BSDS DD statement instead of the ARCHIVE DD statement.

System action

Processing continues.

Severity

0 (informational)

DSN1221E **DSNJSLR ERROR RETCODE=*return-code*REASON CODE=*reason-code* VSAM RETURN CODE=*vsam-return-code* ERROR CODE=*error-code***

Explanation

The stand-alone log read function resulted in a VSAM error.

The *vsam-return-code* and *error-code* values identify the nature of the VSAM error. Refer to the appropriate VSAM publication for an explanation of these codes.

System action

Processing continues.

Severity

0 (informational)

Related tasks

Reading log records with OPEN, GET, and CLOSE (Db2 Administration Guide)

Related reference

Registers and return codes (Db2 Administration Guide)

DSN1222E **DSNJSLR ERROR RETCODE=*return-code* REASON CODE=*reason-code* DYNAMIC ALLOCATION INFORMATION CODE=*dynamic-allocation-code* ERROR CODE=*error-code***

Explanation

An error occurred while dynamically allocating a log data set. The *dynamic-allocation-code* and e*error-code* values were returned by the dynamic allocation SVC and identify the nature of the error. Refer to the appropriate MVS publication for an explanation of these codes.

System action

Processing terminates.

Severity

12 (severe error)

Related tasks

Reading log records with OPEN, GET, and CLOSE (Db2 Administration Guide)

Related reference

Registers and return codes (Db2 Administration Guide)

DSN1223E **DSNJSLR ERROR RETCODE=*return-code*REASON CODE=*reason-code* RDJFCB RETURN CODE=*rdjfcb-return-code***

Explanation

An error occurred while trying to read the job file control block.

The RDJFCB return code (*rdjfcb-return-code*) identifies the nature of the error. Refer to the appropriate MVS publication for an explanation of these codes.

System action

Processing continues.

Severity

0 (informational)

Related tasks

Reading log records with OPEN, GET, and CLOSE (Db2 Administration Guide)

Related reference

Registers and return codes (Db2 Administration Guide)

DSN1224I ***csect-name* SPECIFIED LOG type *nnnnnnnnnnn* COULD NOT BE LOCATED FOR MEMBER *mbn***

Explanation

The specified start or end log record address could not be found in the available log data sets. This error might indicate that a specific log record could not be formatted.

Type
RBASTART/RBAEND/LRSNSTART/LRSNEND

nnnnnnnnnnn
Specified start or end log RBA/LRSN

mbn
Member name. For non-data sharing, this value is blank

System action

Processing continues.

User response

Check that the specified start log record address (RBA or LRSN) is required for the determination of the problem. Either correct the log range to the specification that you want, or provide the missing log data sets either in the ACTIVE*n* or ARCHIVE DD statements.

A common problem is to specify an excessively large range to express that all available log records should be formatted. If all available log records should be formatted, simply omit the low and high limits to suppress this message.

Problem determination

Contact IBM Software Support for assistance.

Severity

4 (warning)

DSN1300E ***csect-name* RBA RANGE CANNOT BE USED TO PRINT LOG RECORDS FROM MULTIPLE DB2 SYSTEMS**

Explanation

RBASTART and RBAEND cannot be used to define the range when selecting log records from multiple Db2 systems. LRSNSTART and LRSNEND should be used instead.

System action

Processing terminates.

User response

Resubmit the job with either RBA values only or LRSN values only.

DSN1303E ***csect-name* INCOMPATIBLE DD STATEMENTS WERE SPECIFIED FOR LOG PROCESSING**

Explanation

Either MxxACTn or MxxARCHV was erroneously specified in conjunction with MxxBSDS to locate the log data sets of a member of a Db2 data sharing group for a DSN1LOGP job.

System action

Processing terminates.

User response

Correct the DD statement and resubmit the job.

DSN1309E ***csect-name*** **SPECIFIED END RANGE IS LESS THAN START RANGE**

Explanation

The value specified for ENDLRSN or ENDRBA is less than the value of STARTLRSN or STARTRBA for a DSN1LOGP job.

System action

Processing terminates.

User response

Resubmit the job with correct start and end values.

DSN1400I ***csect-name*** **ERROR: UNABLE TO OBTAIN THE EBCDIC CCSID SETTING FROM DSNHDECP**

Explanation

The program (indicated by *csect-name*) was unable to load the DSNHDECP module or unable to determine the EBCDIC CCSID setting. The setting is required to convert any trace fields that are in Unicode to EBCDIC.

csect-name
The name of the control section that issued the message.

System action

Processing continues.

Programmer response

Ensure that the site-defined DSNHDECP module is available to the program through the STEPLIB, JOBLIB, or system link list. The site-defined DSNHDECP module typically resides in the *prefix*.SDSNEXIT library. The program should use the same DSNHDECP module as the Db2 subsystem from which the SMF records were obtained.

Severity

12 (severe error)

Related reference
DSN1SMFP (Db2 Utilities)
APPL DEFAULTS field (Db2 Installation and Migration)

DSN1401I ***csect-name*** **ERROR: UNABLE TO ALLOCATE STORAGE FOR IO AREA**

Explanation

The program (indicated by *csect-name*) was unable to allocate dynamic storage that is required for processing input and output.

csect-name
The name of the control section that issued the message.

System action

The program terminates.

Programmer response

Increase the region size of the job or job step that executes the program. If the problem occurs during peak system load, you might need to run the program at a different time.

Severity

12 (severe error)

Related reference
DSNTSMFD (Db2 Utilities)
DSN1SMFP (Db2 Utilities)

DSN1402I ***csect-name*** **ERROR:** ***action-type*** **ERROR FOR DD** ***dd-name***

Explanation

The program (indicated by *csect-name*) was unable to allocate dynamic storage that is required for processing input and output.

csect-name
The name of the control section that issued the message.

action-type
The action that was attempted: OPEN, WRITE, or CLOSE. Typical causes for this condition include, but are not limited to, the following causes:

OPEN

- The data set has invalid attributes (such as record format or logical record length).
- The data set is protected or otherwise unavailable.
- The job step does not contain a DD statement for the file that is identified in the message.

WRITE

- The data set has invalid attributes (such as record format or logical record length).

- The data set is protected or otherwise unavailable.

dd-name
The identifier of the file that was being opened or closed.

System action

The program terminates.

Programmer response

If a DD statement for *dd-name* does not already exist in the job step that executes the program, add that DD statement. Otherwise, verify the attributes of the data set that is allocated to *dd-name*. Ensure that the data set is not in use by another agent and that it is available for write access by the user ID used to execute the program. Check the system log for evidence of system or device errors.

Severity

12 (severe error)

Related reference
DSNTSMFD (Db2 Utilities)
DSN1SMFP (Db2 Utilities)

DSN1403I ***csect-name*** **ERROR: INPUT RECORD** ***record-number*** **(SMF TYPE** ***smf-type*****, IFCID TYPE** ***ifcid-type*****) CANNOT BE PROCESSED, REASON** ***reason-code***

Explanation

The program (indicated by *csect-name*) encountered an integrity problem with the indicated input record number. The record cannot be processed and is excluded from the output reports.

csect-name
The name of the control section that issued the message.

record-number
The input record number where the integrity problem occurred.

smf-type
The type code of the System Management Facility.

ifcid-type
The type code of the Instrumentation Facility Component.

reason-code
A numeric value that indicates the reason that the record cannot be processed.

1
The standard header cannot be located.

2
More than one standard header was located.

3
An unknown header type was encountered.

4
The length of the record did not meet the minimum length for processing.

5
The offset that is specified in the self-defining section for a data section exceeds the length of the input record.

6
An unexpected number of items were found in the data section.

System action

Program processing continues with the next input record.

Programmer response

See the problem determination section. Remove the corrupted record and try again. If the error persists, the input data set to the program is probably corrupted.

Problem determination

If *ifcid-type* is UNKNOWN, the problem was found in the product section of the indicated SMF record. Each record of SMF type 101 and 102 should contain a product section with one standard header. The product section can also contain zero or more of the following items: a correlation header, a CPU header, a distributed data header, a trace header, and a data sharing header. Other headers in the product section are unexpected bythe program. The length of the record must be at least long enough to contain a writer header section, a self-defining section, a product section, and at least one data section.

If *ifcid-type* is not UNKNOWN, the problem was found in a data section of the indicated SMF record. Each IFCID should have at least one data item. The exact number depends on the IFCID type.

Severity

8 (error)

Related concepts
Types of Db2 traces (Db2 Performance)
Related tasks
Recording SMF trace data (Db2 Performance)

Related reference

Standard report header (Db2 Utilities)

DSN1404I ***csect-name*** **WARNING: INPUT RECORD** ***record-number*** **(SMF TYPE** ***smf-type*****, IFCID TYPE** ***ifcid-type*****) WAS PROCESSED WITH WARNINGS**

Explanation

The program (indicated by *csect-name*) detected an irregularity while processing the indicated input record number. The problem is described in one or more preceding messages. A report was generated for the record but might contain problems as noted in preceding error messages.

csect-name
The name of the control section that issued the message.

record-number
The input record number where the irregularity occurred.

smf-type
The type code of the System Management Facility.

ifcid-type
The type code of the Instrumentation Facility Component.

System action

Program processing continues.

Programmer response

For more information, see the preceding message.

Severity

4 (warning)

Related concepts

Types of Db2 traces (Db2 Performance)

Related tasks

Recording SMF trace data (Db2 Performance)

Related reference

DSN1SMFP (Db2 Utilities)

DSN1405I ***csect-name*** **WARNING: EBCDIC CCSID SPECIFIED FOR** ***csect-name*****,** ***decp-ccsid*****, DOES NOT MATCH THE EBCDIC CCSID OF THE CURRENT IFCID 106 RECORD,** ***ifcid-ccsid***

Explanation

The EBCDIC CCSID of the current IFCID 106 record does not match the EBCDIC CCSID in the DSNHDECP module that is loaded by the program (indicated by *csect-name*) at startup time. The program uses this setting to convert any trace data that is in Unicode to EBCDIC so that it can be written to the output reports. If the CCSID is incorrect, the results of this conversion are unpredictable.

csect-name
The name of the control section that issued the message.

decp-ccsid
The CCSID from module DSNHDECP, which is the module that defines all Db2 default option values. This value depends on the environment, and is one of the following values:

- The default EBCDIC single-byte CCSID (value of field DECPSID)
- The default EBCDIC multi-byte CCSID (value of field DECPMID)

ifcid-ccsid
The IFCID 106 record where the mismatch exists. The IFCID 106 record is identified in the DSN1404I message that follows this message.

System action

Program processing continues. The EBCDIC CCSID in the current IFCID 106 record is used to convert any Unicode data in that record. The program then reverts to the EBCDIC CCSID specified in the DSNHDECP it loaded at start of execution.

Programmer response

This error indicates that the wrong DSNHDECP module was loaded by the program, or that the program is processing trace records from more than one Db2 subsystem. If the wrong DSNHDECP module is being used, rerun the input after supplying the correct DSNHDECP module. If input from more than one Db2 subsystem is being processed, run the program for each subsystem.

Severity

4 (warning)

Related concepts

Code pages and CCSIDs (Db2 Internationalization Guide)

Related reference

DSN1SMFP (Db2 Utilities)

Subsystem CCSIDs and encoding schemes (Db2 Internationalization Guide)

Related information

DSN1401I
csect-name ERROR: UNABLE TO ALLOCATE STORAGE FOR IO AREA

DSN1406I *csect-name* ERROR: AN UNEXPECTED RETURN CODE OF *return-code* WAS RECEIVED DURING CONVERSION OF DATA FROM UNICODE TO EBCDIC

Explanation

The program (indicated by *csect-name*) issued a request to z/OS Unicode services to convert trace data from Unicode to EBCDIC. However, the request failed with the indicated return code. A report was generated for the record, but fields for data that was not converted contain blanks.

csect-name
The name of the control section that issued the message.

return-code
The return code that was issued by z/OS Unicode services.

System action

Program processing continues.

Programmer response

Review the *return-code* value to determine whether this error is a system or setup error. If an invalid target CCSID is indicated, verify that the EBCDIC CCSID in use by the program is valid. If this message is preceded by message DSN1405I, the EBCDIC CCSID was obtained from the current IFCID 106 record. Otherwise, the EBCIDIC CCSID was obtained from the DSNHDECP module that is loaded by the program at start of execution. Confirm that the EBCDIC CCSID is the one used by the Db2 subsystem from which the SMF records were collected. Otherwise, replace the DSNHDECP module that is used by the program with one that specifies the CCSID used by the Db2 subsystem from which the SMF records were collected.

Severity

4 (warning)

Related concepts

Code pages and CCSIDs (Db2 Internationalization Guide)

Related reference

Return code meanings (z/OS: Unicode Services User's Guide and Reference)
DSN1SMFP (Db2 Utilities)
Subsystem CCSIDs and encoding schemes (Db2 Internationalization Guide)

Related information

DSN1405I
csect-name WARNING: EBCDIC CCSID SPECIFIED FOR *csect-name*, *decp-ccsid*, DOES NOT MATCH THE EBCDIC CCSID OF THE CURRENT IFCID 106 RECORD, *ifcid-ccsid*

DSN1407I *csect-name* WARNING: DATA WAS TRUNCATED DURING CONVERSION TO A HEX STRING

Explanation

Truncation occurred during conversion of a data field to hexadecimal format. The input record is identified by a subsequent DSN1404I message.

csect-name
The name of the control section that issued the message.

System action

Program processing continues.

User response

Data in one or more hexadecimal-formatted fields might be incomplete. Notify the system programmer if the value is critical.

Programmer response

Truncation occurs only for extremely large values, so this message might indicate a data integrity problem in the input record.

Severity

4 (warning)

Related reference

DSN1SMFP (Db2 Utilities)

Related information

DSN1404I
csect-name WARNING: INPUT RECORD *record-number* (SMF TYPE *smf-type*, IFCID TYPE *ifcid-type*) WAS PROCESSED WITH WARNINGS

DSN1409I *csect-name* ERROR: A SEVERE ERROR WAS ENCOUNTERED; UNABLE TO CONTINUE

Explanation

The program (indicated by *csect-name*) encountered an unrecoverable error, as noted by one or more preceding messages.

csect-name
The name of the control section that issued the message.

System action

The program terminates.

User response

Look for other messages that precede this message, and take the indicated actions.

Severity

12 (severe error)

Related reference
DSN1SMFP (Db2 Utilities)
DSNTSMFD (Db2 Utilities)

DSN1410I ***csect-name*** **ERROR: UNABLE TO ALLOCATE MEMORY**

Explanation

The z/OS compression service CSRCESRV is not available.

csect-name
The name of the control section that issued the message.

System action

The program (indicated by *csect-name*) continues execution, but does not decompress any compressed records. Data remains in the compressed form.

User response

No action is required.

However, if you want to decompress the data, run the program on a system with compression services available.

Severity

4 (warning)

Related reference
DSNTSMFD (Db2 Utilities)

DSN1411I **DSNTSMFD ERROR: UNABLE TO DECOMPRESS, RC=*return-code***

Explanation

DSNTSMFD encountered an error while decompressing a record.

return-code
A numeric value that indicates the reason for the failure. The return code is issued by the compression service.

System action

The record is not decompressed. Individual instances of message DSN1411I are issued for each record that cannot be decompressed.

User response

Use the return code provided by the z/OS compression service CSRCESRV to resolve the decompression error.

Severity

8 (error)

Related reference
CSRCESRV - Compress and expand data (z/OS MVS Programming: Assembler Services Reference, Volume 1)

DSN1700E **VALUE FOR KEYWORD xxxxxxxx IS INVALID**

Explanation

The SDMPIN input contains the 'xxxxxxxx'. The value specified for that keyword is invalid.

System action

Processing is terminated.

User response

Provide a correct keyword value and resubmit the job.

Severity

8 (error)

DSN1701E **START TRACE MISSING**

Explanation

The START TRACE command is required. The first keyword record of the SDMPIN input does not contain a START TRACE command.

System action

Processing is terminated.

User response

Resubmit the job with START TRACE as the first keyword record in the SDMPIN input.

Severity

8 (error)

DSN1702E KEYWORD xxxxxxxx MULTIPLY DEFINED

Explanation

Keyword 'xxxxxxxx' was specified multiple times in the SDMPIN input. All keywords are allowed only once.

System action

Processing is terminated.

User response

Specify the keyword only once. Resubmit the job.

Severity

8 (error)

DSN1703E KEYWORD xxxxxxxx UNKNOWN

Explanation

DSN1SDMP does not recognize the keyword 'xxxxxxxx'.

System action

Processing is terminated.

User response

Make sure that all keywords are valid and then resubmit the job.

Severity

8 (error)

DSN1704E UNABLE TO OBTAIN RETURN-AREA STORAGE

Explanation

An error resulted when DSN1SDMP attempted to obtain storage for an instrumentation facility interface (IFI) return area.

System action

Processing is terminated.

User response

When you resubmit the job either:

- Specify a larger region size in the job control language.
- Reduce the value of BUFSIZE on START TRACE.

Severity

8 (error)

DSN1705E SYNTAX ERROR, LINE = ll, COLUMN = cc

Explanation

A syntax error was encountered in the SDMPIN input. The location of the error is given by:

ll
The line number within the input stream that is in error.

cc
The column number.

System action

Processing is terminated.

User response

Correct the syntax error and then resubmit the error.

Severity

8 (error)

DSN1706E INVALID ABEND CODE SPECIFIED

Explanation

An invalid abend code was specified on the ACTION keyword.

System action

Processing is terminated.

User response

Allowable abend codes are 00E60100 through 00E60199. Specify an allowable abend code and then resubmit the job.

Severity

8 (error)

DSN1707E LIMIT OF 50 STATEMENTS EXCEEDED

Explanation

DSN1SDMP allows a maximum of 50 statements for a given job.

System action

Processing is terminated.

User response

Use no more than 50 statements when you resubmit the job.

Severity

8 (error)

DSN1708E TOO MANY SELECT CRITERIA VALUES

Explanation

DSN1SDMP allows a maximum of eight SELECT criteria values.

System action

Processing is terminated.

User response

Use no more than eight SELECT criteria values and then resubmit the job.

Severity

8 (error)

DSN1709E INPUT/OUTPUT ERROR, DDNAME=xxxxxxxx

Explanation

An error resulted when DSN1SDMP attempted to do I/O. The ddname of the data set to which I/O failed is 'xxxxxxxx'

System action

Processing is terminated.

User response

Ensure that the 'xxxxxxxx' DD statement in the job control language is valid and resubmit the job.

Severity

8 (error)

DSN1710E UNABLE TO OPEN SDMPTRAC

Explanation

An error resulted when DSN1SDMP attempted to open the SDMPTRAC data set.

System action

Processing is terminated.

User response

Ensure that the SDMPTRAC DD statement in the job control language is valid and resubmit the job.

Severity

8 (error)

DSN1711E START TRACE ERROR, REASON=xxxxxxxx

Explanation

Db2 did not process the submitted START TRACE command. The reason code 'xxxxxxxx' is returned from the instrumentation facility interface (IFI).

System action

Processing is terminated.

User response

Check the return area that follows message DSN1712I. Possible problems are:

- The syntax of the START TRACE command is invalid. Correct the command and resubmit the job. Do not include the subsystem recognition character before the command text.
- The user does not have authority to issue trace commands. Obtain trace authority and resubmit the job.

Severity

8 (error)

DSN1712I START TRACE RETURN-AREA FOLLOWS:

Explanation

DSN1SDMP issued the START TRACE command and the return area resulting from the instrumentation facility interface (IFI) COMMAND call follows this message. The return area contains Db2 command response messages.

System action

Processing continues.

Severity

0 (informational)

DSN1713I READA ERROR, REASON=xxxxxxxx

Explanation

An error resulted when DSN1SDMP issued a instrumentation facility interface (IFI) READA call in an attempt to obtain Db2 trace records. Reason code 'xxxxxxxx' is the IFI reason code returned in IFCARC2.

System action

DSN1SDMP writes any records that were returned and processing continues.

User response

Possible reason codes are:

00E60802
The DSN1SDMP return area was not large enough to hold the returned trace records. This condition should not occur because the DSN1SDMP return area is the same size as the requested OPn monitor buffer.

00E60803
No trace data was available when the READA request was made. This condition occurs when the trace started by DSN1SDMP is stopped from the operator console or by another application program.

Severity

0 (informational)

DSN1714I TRACE RECORDS WERE LOST

Explanation

Db2 trace records were lost and are not contained in the SDMPTRAC data set.

System action

Processing continues.

User response

Possible reasons for lost trace records are:

- The OP buffer is not large enough. Specify a larger BUFSIZE on the START TRACE command and then resubmit the job.
- The trace data is too voluminous and buffer is overflowing before the data can be read. Specify a more granular selectivity on the START TRACE command and then resubmit the job.

Severity

0 (informational)

DSN1715E UNABLE TO OBTAIN WORK SPACE

Explanation

An error resulted when DSN1SDMP attempted to obtain work area storage.

System action

Processing is terminated.

User response

Specify a larger region size in the job control language and then resubmit the job.

Severity

8 (error)

DSN1716E UNABLE TO OPEN SDMPIN

Explanation

An error resulted when DSN1SDMP attempted to open the SDMPIN data set.

System action

Processing is terminated.

User response

Ensure that the SDMPIN DD statement in the job control language is valid and resubmit the job.

Severity

8 (error)

DSN1717I STOP TRACE RETURN-AREA FOLLOWS:

Explanation

DSN1SDMP issued the STOP TRACE command and the return area resulting from the instrumentation facility interface (IFI) COMMAND call follows this message. The return area contains Db2 command response messages.

System action

Processing continues.

Severity

0 (informational)

DSN1718E STOP TRACE ERROR, REASON=xxxxxxxx

Explanation

DSN1SDMP attempted to submit a Db2 STOP TRACE command at the end of its processing; however, the command failed. The reason code returned from the instrumentation facility interface (IFI) is 'xxxxxxxx'.

System action

Processing is terminated.

User response

Check the return area that follows message DSN1717I. One possible problem is:

- The trace has already been stopped from the operator's console or by another application program.

Severity

8 (error)

DSN1719I ACTIONS ARE COMPLETE

Explanation

All requested IFC selective dump actions finished. All trace records have been written to the specified destination(s). If an abend action was requested, all abends have taken place.

System action

DSN1SDMP stops the trace that it started and completes processing.

Severity

0 (informational)

DSN1720I READA ERROR, REASON=xxxxxxxx

Explanation

An error resulted when DSN1SDMP issued a instrumentation facility interface (IFI) READA call in an attempt to obtain Db2 trace records. Reason code 'xxxxxxxx' is the IFI reason code returned in IFCARC2.

System action

Processing is terminated.

User response

One possible reason code is:

00E60824
The user does not have correct monitor authority. Obtain the correct monitor authority (MONITOR1 or MONITOR2) and resubmit the job.

Severity

8 (error)

DSN1800I START OF DSN1CHKR FOR JOB *job-name step-name*

Explanation

This message indicates that the DSN1CHKR utility started processing.

job-name
The name of the job that requested DSN1CHKR.

step-name
The name of the job step that requested DSN1CHKR.

System action

DSN1CHKR starts processing.

User response

No action is required.

Severity

0 (informational)

DSN1806I IDMAP ENTRY entry-number IN PAGE page-number IS IN ERROR

Explanation

This message indicates that the IDMAP entry 'entry-number' in page 'page-number' is not valid. Valid entries are from X'0014' to X'0Fhh' (depending on the number of IDMAP entries in the page).

System action

The page is marked for output if the FORMAT/DUMP option is in effect. Processing continues.

Problem determination

Contact IBM Support for assistance.

Severity

4 (warning)

DSN1807I CHILD POINTER chd-rid IN ERROR IN PARENT RECORD par-rid IN PAGE pppppp

Explanation

This message indicates that the parent record with record ID 'par-rid' in page 'pppppp' has a child pointer with an invalid record ID of 'chd-rid'. If this message is preceded by DSN1835I, then the child pointer is pointing to a page beyond the high used RBA of the data set. Either the child pointer is invalid or the data set has been truncated.

System action

The page is marked for output if the FORMAT/DUMP option is in effect. Processing continues.

Problem determination

Contact IBM Support for assistance.

Severity

4 (warning)

DSN1808I OVERFLOW RECORD IN ERROR - OVERFLOW RID = ovf-rid, POINTER RID = ptr-rid

Explanation

This message indicates that the record at record id 'ovf-rid', pointed to by the pointer record at record id 'ptr-rid', is not an overflow record.

System action

The page is marked for output if the FORMAT/DUMP option is in effect. Processing continues.

Problem determination

Contact IBM Support for assistance.

Severity

4 (warning)

DSN1809I OVERFLOW RECORD IN ERROR - OVERFLOW RID = ovf-rid, HAS NO POINTER RECORD

Explanation

This message indicates no pointer record points to the overflow record with record id 'ovf-rid'.

System action

The page is marked for output if the FORMAT/DUMP option is in effect. Processing continues.

Problem determination

Contact IBM Support for assistance.

Severity

4 (warning)

DSN1810I INPUT DATA SET INVALID, NOT A CHECKABLE SYSTEM TABLESPACE

Explanation

This message indicates that the data set defined by SYSUT1 is not a checkable table space and therefore cannot be analyzed.

System action

Processing terminates.

System programmer response

Correct the SYSUT1 DD statement and rerun the job.

Problem determination

Checkable system table spaces must be referenced by a hashed entry or contain links. Single-record table spaces referenced by an index are not checkable.

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Severity

8 (error)

DSN1811I ANCHOR POINT PAGE page IS OUT OF RANGE - VALUE IS LESS THAN 2 OR GREATER THAN 'E'X

Explanation

The ANCHOR function has an incorrect page value for the page-slot argument. Anchor points can be found only on pages 2 through 14 (E in hexadecimal). Any anchor point page specified beyond that range is invalid.

System action

Processing continues with the next set of parameters.

Severity

4 (warning)

DSN1812I ORPHAN ID = orph-id ID ENTRY = entry-val FOUND IN PAGE page-number

Explanation

This message indicates that the record with id = 'orph-id' and id entry = 'entry-val' in page 'page-number' is an orphan.

System action

Processing continues.

Problem determination

Contact IBM Support for assistance.

Severity

4 (warning)

DSN1813I UNABLE TO DUMP PAGE page-number

Explanation

An error was encountered while retrieving the page and therefore page 'page-number' could not be dumped.

System action

Processing continues.

Problem determination

Examine previous diagnostic and system messages, correct problem, and rerun job.

Severity

4 (warning)

DSN1814I UNEXPECTED END OF DATA AT PAGE page-number

Explanation

The END-OF-DATA condition was reached before expected at page 'page-number'.

System action

Processing terminates.

Problem determination

Examine previous diagnostic and system messages, correct problem and rerun job.

Severity

8 (error)

DSN1815I DSN1CHKR COMPLETED SUCCESSFULLY, *pg-cnt* PAGES PROCESSED

Explanation

The DSN1CHKR utility successfully completed processing; all checks are completed.

pg-cnt
The number of pages that were read during check processing. This number is not the number of pages in the table space.

System action

Processing terminates.

User response

No action is required.

Severity

0 (informational)

DSN1816I DSN1CHKR TERMINATED WITH ERRORS, *pg-cnt* PAGES PROCESSED

Explanation

This message indicates that the DSN1CHKR utility did not successfully complete processing.

pg-cnt
The number of pages that were read during check processing. This number is not the number of pages in the table space.

System action

Processing terminates.

User response

Examine previous diagnostic messages. If possible, correct any problems and rerun the job.

Severity

4 (warning) or 8 (error)

DSN1817I ARGUMENT *arg-val* OF THE MAP COMMAND IS INVALID

Explanation

This message indicates that the argument '*arg-val*' of the MAP command is invalid.

System action

Processing terminates.

Problem determination

Check the syntax of the command for invalid arguments.

Examples of invalid arguments are:

- The offset value of the ANCHOR or HASH option is neither zero (0) nor four (4).
- When the ANCHOR and RID option has been specified, the page number specified is less than two, which would be a nondata page.

Severity

8 (error)

DSN1823I INVALID SYNTAX, *expected-character* EXPECTED

Explanation

This message indicates that an unexpected character was found while parsing the parmlist and that *expected-character* was the expected character.

System action

Processing terminates.

Problem determination

Correct the syntax and reissue the command.

Severity

8 (error)

Related information

About Db2 and related commands (Db2 Commands)

DSN1824I INVALID HEX DATA: hex-data

Explanation

This message indicates that the input value 'hex-data' is not a valid hexadecimal number.

System action

Processing terminates.

Problem determination

Correct input value and rerun job.

Severity

8 (error)

DSN1825I INPUT VALUE EITHER TOO LONG OR OMITTED: in-val

Explanation

This message indicates that the input value 'in-val' is either greater than 8 hexadecimal digits or was totally omitted.

System action

Processing terminates.

Problem determination

Correct input value and rerun job.

Severity

8 (error)

DSN1830I INVALID NUMBERS OF VALUES SPECIFIED FOR *func-name*

Explanation

This message indicates that either:

- No value was specified.
- An odd number of values was specified for a function that requires an even number of values.

System action

Processing terminates.

Problem determination

Check the syntax of the parameter list, correct the parameter list, and rerun the job.

Severity

8 (error)

Related concepts

Db2 online utilities (Db2 Utilities)

Db2 stand-alone utilities (Db2 Utilities)

DSN1831I **END OF DATE REACHED, PAGE = page-number IS OUT OF RANGE**

Explanation

This message indicates that page 'page-no', specified as a parameter of the MAP option, caused the END-OF-DATA condition to be reached. The page number is invalid for the table space being mapped.

System action

Processing continues with the next set of parameters.

Problem determination

Correct the page parameter of the MAP option and rerun the job.

Severity

4 (warning)

DSN1833I **ANCHOR POINT IS NOT IN USE**

Explanation

The anchor point to be mapped has a value of 0, which means that it is not in use. Therefore, no links are checked.

System action

Processing continues with the next set of parameters.

Severity

4 (warning)

DSN1834I **GETMAIN FOR BUFFERS FAILED. NO MORE AVAILABLE STORAGE IN ADDRESS SPACE.**

Explanation

The GETMAIN for page buffers failed. There is no more virtual storage available in the address space. The table space being checked is too large to be processed with the current system configuration.

System action

Processing terminates.

Problem determination

Make changes to the system configuration, if possible, to allow more virtual storage to be available in the address space.

Severity

8 (error)

DSN1835I **THE REQUESTED PAGE page-no IS BEYOND THE END OF THE TABLESPACE.**

Explanation

A request for a page number from an anchor point or a child pointer in a parent record is pointing beyond the high used RBA of the data set. Either the rid is in error or the data set has been truncated.

System action

The page is marked for output if the FORMAT/DUMP option is in effect. Processing continues.

Problem determination

Examine previous diagnostic and system messages, correct problem if possible and rerun the job. Otherwise, contact IBM Support for assistance.

Severity

4 (warning)

DSN1930I ***csect-name*** **THE INPUT PARAMETER *xxxxxxxx* CONFLICTS WITH THE HEADER PAGE FIELD HPG*yyyy*. THE INPUT PARAMETER WILL BE USED**

Explanation

The specified parameter does not agree with the value of the related field in the header page. The utility will continue the execution using the specified input parameter.

System action

The utility continues

User response

Confirm that the input parameter has the correct value.

Severity

0 (informational)

DSN1931I ***csect-name*** **THE INPUT PARAMETER *utility-parameter-name*** **CONFLICTS WITH THE HEADER PAGE FIELD *header-field-***

***name*. THE HEADER PAGE VALUE WILL BE USED**

Explanation

The specified parameter does not agree with the value of the related field in the header page. The utility continues the execution by using the header page value.

csect-name
The name of the control section that issued the message.

utility-parameter-name
The name of a utility parameter that was specified with a value in conflict with the header page field value.

header-field-name
The name of the field in the header page (DSNDHPG) that is in conflict with the *utility-parameter-name* value in the utility control statement.

System action

The utility continues

User response

Confirm that the input parameter has the correct value.

Severity

0 (informational)

DSN1937I ***csect-name* TXT-DECK *deck-name* BUILT *record-count* RECORDS WRITTEN**

Explanation

A text deck has been generated from the dictionary and written to the data set that is specified by the data definition statement DSN1DICT.

csect-name
The name of the control section that issued the message.

deck-name
The name of the new text deck. This value matches the value of the invocation parameter EXTNDICT.

record-count
The number of records that were written.

System action

Processing terminates.

User response

No action is required.

Severity

0 (informational)

DSN1938I ***csect-name* ERROR ON DDNAME/ DATASET FOR EXTERNALIZED DICTIONARY DSN1DICT**

Explanation

An error was encountered during an attempt to write to the data set that is specified with the data definition statement DSN1DICT.

System action

Processing terminates.

User response

Verify that the name of the correct data definition statement has been supplied in the JCL stream and that the data set attributes are correct. Review other messages in the job output. Correct the cause of the problem, and resubmit the job.

Severity

8 (error)

DSN1939I ***csect-name* AN INVALID CI SIZE HAS BEEN DETECTED**

Explanation

The VSAM Control Interval (CI) size for the output data set is invalid. The CI size must be 4K, or it must match the page size.

System action

Processing terminates.

System programmer response

Redefine the output VSAM data set so that the CI size is either 4K or equal to the page size of the object that is being processed.

Severity

8 (error)

DSN1940I ***csect-name* COMPRESSION REPORT *compression-report***

Explanation

DSN1COMP completed successfully. This message contains the DSN1COMP compression report. The format of *compression-report* depends on the type of object specified when the utility was run. For more information and examples, see DSN1COMP output (Db2 Utilities).

Table space report format

The DN1COMP utility report for a table space has the following format.

```
DSN1940I DSN1COMP COMPRESSION REPORT
             num  KB WITHOUT COMPRESSION
             num  KB WITH COMPRESSION
             num  PERCENT OF THE BYTES WOULD
BE SAVED

             num  ROWS SCANNED TO BUILD
DICTIONARY
             num  ROWS SCANNED TO PROVIDE
COMPRESSION ESTIMATE
             num  DICTIONARY ENTRIES

             num  BYTES FOR AVERAGE
UNCOMPRESSED ROW LENGTH
             num  BYTES FOR AVERAGE COMPRESSED
ROW LENGTH

             num  DICTIONARY PAGES REQUIRED
             num  PAGES REQUIRED WITHOUT
COMPRESSION
             num  PAGES REQUIRED WITH
COMPRESSION
             num  PERCENT OF THE DB2 DATA
PAGES WOULD BE SAVED
```

Index report format

The DN1COMP utility report for an index has the following format.

```
DSN1940I DSN1COMP COMPRESSION REPORT

             num  Index Leaf Pages Processed
             num  Keys Processed
             num  Rids Processed
             num  KB of Key Data Processed
             num  KB of Compressed Keys
Produced


                  EVALUATION OF COMPRESSION
WITH DIFFERENT INDEX PAGE SIZES:


-----------------------------------------------
             num  K Page Buffer Size yields a
             num  % Reduction in Index Leaf
Page Space
                  The Resulting Index would
have approximately
             num  % of the original index's
Leaf Page Space
                  No Bufferpool Space would be
unused

-----------------------------------------------


-----------------------------------------------
             num  K Page Buffer Size yields a
             num  % Reduction in Index Leaf
Page Space
                  The Resulting Index would
have approximately
             num  % of the original index's
Leaf Page Space
             num  % of Bufferpool Space would
be unused to
                  ensure keys fit into
compressed buffers

-----------------------------------------------
```

Uncompressed LOB table space format

The DSN1COMP utility report for an uncompressed LOB table space has the following format.

```
DSN1940I DSN1COMP COMPRESSION REPORT
 DSN1COMP run on uncompressed LOB table space


 LOB table space statistics

-----------------------------------------------
----------
 Number of
LOBs
                    num LOBs
 Minimum LOB
size
                  num KB
 Maximum LOB
size
                  num KB
 Average LOB
size
                  num KB


 LOB compression ratio

-----------------------------------------------
----------
 Total LOB data
compressed
               num KB
 Total LOB data
uncompressed
               num KB
 Percentage of KB
saved
              num %

 Minimum System pages
required
          num Pages
 Data pages needed for compressed LOB table
space                             num Pages
 Data pages needed for uncompressed LOB table
space                            num Pages
 Percentage of Data pages
saved
     num %

 Current page
size
                num KB

 EVALUATION OF COMPRESSION WITH DIFFERENT PAGE
SIZES
 Note: System Pages may contain LOB data!

-----------------------------------------------
----------
 4K page size:
   Minimum System pages
required
       num Pages
   Additional Data pages needed for compressed
LOBs                              num Pages
   Additional Data pages needed for
uncompressed LOBs                           num
Pages
   Data pages saved (not including system
pages)                                num %
```

```
 8K page size:
   Minimum System pages
required
       num Pages
   Additional Data pages needed for compressed
LOBs                          num Pages
   Additional Data pages needed for
uncompressed LOBs                          num
Pages
   Data pages saved (not including system
pages)                                num %

 16K page size:
   Minimum System pages
required
       num Pages
   Additional Data pages needed for compressed
LOBs                          num Pages
   Additional Data pages needed for
uncompressed LOBs                          num
Pages
   Data pages saved (not including system
pages)                                num %

 32K page size:
   Minimum System pages
required
       num Pages
   Additional Data pages needed for compressed
LOBs                          num Pages
   Additional Data pages needed for
uncompressed LOBs                          num
Pages
   Data pages saved (not including system
pages)                                num %
```

Compressed LOB table space format

The DSN1COMP utility report for a compressed LOB table space has the following format.

```
DSN1940I DSN1COMP COMPRESSION REPORT
 DSN1COMP run on compressed LOB table space


 LOB table space statistics

-----------------------------------------------
----------
 Number of
LOBs
                    num LOBs
 Minimum LOB
size
                  num KB
 Maximum LOB
size
                  num KB
 Average LOB
size
                  num KB


 Table space with compression (in KB)

-----------------------------------------------
----------
 Total uncompressed
data
           num KB
 Total compressed
data
             num KB
 Total LOB
data
                    num KB


 Table space if uncompressed (in KB)

-----------------------------------------------
----------
 Total uncompressed
data
           num KB
 Total compressed
data
             num KB
 Total LOB
data
                    num KB


 LOB compression ratio

-----------------------------------------------
----------
 Total LOB data
compressed
              num KB
 Total LOB data
uncompressed
              num KB
 Percentage of KB
saved
             num %

 Minimum System pages
required
         num Pages
 Data pages needed for compressed LOB table
space                             num Pages
 Data pages needed for uncompressed LOB table
space                           num Pages
 Percentage of Data pages
saved
     num %

 Current page
size
                num KB


 EVALUATION OF COMPRESSION WITH DIFFERENT PAGE
SIZES
 Note: System Pages may contain LOB data!

-----------------------------------------------
----------
 4K page size:
   Minimum System pages
required
       num Pages
   Additional Data pages needed for compressed
LOBs                          num Pages
   Additional Data pages needed for
uncompressed LOBs                          num
Pages
   Data pages saved (not including system
pages)                                num %

 8K page size:
   Minimum System pages
required
       num Pages
   Additional Data pages needed for compressed
LOBs                          num Pages
   Additional Data pages needed for
uncompressed LOBs                          num
Pages
   Data pages saved (not including system
pages)                                num %

 16K page size:
   Minimum System pages
required
       num Pages
   Additional Data pages needed for compressed
LOBs                          num Pages
   Additional Data pages needed for
uncompressed LOBs                          num
Pages
   Data pages saved (not including system
pages)                                num %
```

```
 32K page size:
   Minimum System pages
required
       num Pages
   Additional Data pages needed for compressed
LOBs                           num Pages
   Additional Data pages needed for
uncompressed LOBs                           num
Pages
   Data pages saved (not including system
pages)                                 num %
```

System action

The utility completed successfully.

Severity

0 (informational)

Related tasks

Determining the effectiveness of compression (Managing Db2 Performance)

Related reference

DSN1COMP (Db2 Utilities)

DSN1COMP output (Db2 Utilities)

DSN1941I ***csect-name*** **COMPRESSION ESTIMATE WAS NOT CALCULATED**

Explanation

There is insufficient data to build a compression dictionary. Either the input data set is empty, or the number of rows in the input data set was insufficient to build the dictionary.

System action

Processing terminated.

User response

Increase the number of rows in the input data set.

Severity

8 (error)

DSN1942I ***csect-name*** **ERROR WHEN BUILDING THE COMPRESSION DICTIONARY**

Explanation

An internal error was encountered while building the dictionary.

System action

Processing terminated.

System programmer response

Determine the failing environment. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Severity

8 (error)

DSN1943I ***csect-name*** **DICTIONARY PAGE ENCOUNTERED**

Explanation

A dictionary page was encountered while processing the input data set. This indicates that the data is in compressed format.

System action

Processing terminated.

User response

Run DSN1COMP on a data set containing data that is not in a compressed format.

Severity

8 (error)

DSN1944I ***csect-name*** **INPUT PARAMETERS**

Explanation

The input parameters used by DSN1COMP are either user-supplied or default values.

System action

Processing continues.

Severity

0 (informational)

DSN1945I ***csect-name*** **DICTIONARY TREE**

Explanation

The compression dictionary tree follows. Each node is formatted in the SYSPRINT data set.

System action

Processing continues.

Severity

0 (informational)

DSN1946I ***csect-name*** **IMAGE COPY CONTAINING MULTIPLE PARTITIONS**

Explanation

DSN1COMP will build a compression report given sufficient data in the first partition only, of an Image Copy containing multiple partitions.

System action

Processing terminated.

User response

Run DSN1COMP on an image copy containing a single partition.

Severity

8 (error)

DSN1947I **DSN1947I** ***csect-name*** **COMPRESSION UNAVAILABLE FOR INDEX SPACES**

Explanation

Index data was provided as input to DSN1COMP. Compression is supported only for table space data.

System action

Processing terminated.

User response

Provide DSN1COMP with data containing table space data.

Severity

8 (error)

DSN1948I ***csect-name*** **UNABLE TO RESET DICTIONARY VERSION**

Explanation

DSN1COPY cannot reset the dictionary version for one of the reasons below.

- The dictionary version was not found.
- The input data set is an incremental or an inline image copy.

System action

Processing continues.

User response

DSN1COPY was not able to reset the dictionary version. Run the REORG utility and omit the KEEPDICTIONARY keyword to get a new dictionary.

Severity

4 (warning)

Related tasks

Compressing data by using the LOAD utility (Db2 Utilities)

Related reference

DSN1COPY (Db2 Utilities)

REORG TABLESPACE (Db2 Utilities)

DSN1950I **DSN1COPY HAS SUPPRESSED VSAM OPEN VERIFY, ACBERRFLG=acb-error-code.open-option**

Explanation

DSN1COPY suppresses the VSAM VERIFY done by the VSAM OPEN for the SYSUT1 data set. The VSAM VERIFY is not needed for the VSAM data sets used by Db2. For Db2 VSAM data sets, the data set hi-used RBA in the ICF catalog is always current.

System action

Processing continues.

Severity

0 (informational)

DSN1951I **ODD NUMBER OF HEX CHARACTERS SPECIFIED IN VALUE PARM.**

Explanation

The VALUE parameter contained an odd number of hexadecimal characters. Only even numbers of hexadecimal characters are allowed.

System action

Processing terminates.

User response

Correct the number of hexadecimal digits specified for the VALUE parameter and resubmit the job.

Severity

8 (error)

Related reference

Syntax and options of the DSN1COPY control statement (Db2 Utilities)

DSN1952I **UNEXPECTED END OF INPUT DATA - CHECK FOR INVALID SPECIFICATION OF THE 32K PARAMETER.**

Explanation

End of data occurred for the image copy data set specified in SYSUT1 before the first page could be read. Either the wrong input data set was specified or 32KB was specified even though the input data set contains 4KB pages.

System action

Processing terminates.

User response

Remove the 32KB parameter if the input data set contains 4KB pages, change the name of the input data set to specify a valid image copy, or remove the FULLCOPY or INCRCOPY parameter.

Problem determination

Refer to DSN1COPY documentation for parameter requirements.

Severity

8 (error)

DSN1953I **STARTING PAGE NUMBER REQUIRES AN INPUT DATA SET NAME OF data-set-name**

Explanation

The starting page number of the page range to be printed is inconsistent with the input data set specified.

System action

Processing terminates.

User response

Ensure that NUMPARTS, the 32KB parameter (or its default of 4KB), and the starting page number are correct. If it is correct, change the input data set name as indicated by the message.

Problem determination

Refer to DSN1COPY or DSN1PRNT documentation for parameter requirements.

Severity

8 (error)

DSN1954I **csect-name PARAMETER PAGESIZE OR LOB IS MISSING OR INCORRECTLY SPECIFIED.**

Explanation

This message is issued in the following situations:

- The program tried to determine the page size from the first page of the data set, but the first page is not a header page, or
- The first page is a LOB header page and the LOB parameter is missing.

System action

Processing terminates.

User response

If the input data set is not a LOB table space, specify the PAGESIZE parameter. If the input data set is a LOB table space, specify the LOB or PAGESIZE parameter or both, as appropriate.

Severity

8 (error)

DSN1955I **SYSUT1 DD CARD IS MISSING**

Explanation

No SYSUT1 DD statement was provided.

System action

Processing terminates.

User response

Rerun the job with a SYSUT1 DD statement.

Severity

8 (error)

DSN1956I ***csect-name* SYNTAX ERROR: *parm2* IS SPECIFIED WITHOUT *parm1***

Explanation

The keyword *parm1* must be specified with *parm2*.

System action

Processing terminates.

User response

Resubmit the job specifying the correct keyword.

Severity

8 (error)

DSN1957I ***csect-name*** **COMPRESSED RECORDS CANNOT BE EXPANDED DUE TO INCORRECT INPUT DATA SET SPECIFICATION.**

Explanation

DSN1PRNT issues this message when the EXPAND option is specified. The input data set might be an incremental image copy data set.

System action

Processing terminates.

User response

Resubmit the job specifying the correct input data set.

Severity

8 (error)

DSN1958I **INVALID DATA SET NAME.**

Explanation

A Db2 table space was given an incorrect name.

System action

Processing terminates.

User response

Correct the output data set name if FULLCOPY or INCRCOPY were specified. If a page range is being printed, correct the input data set name.

Severity

8 (error)

Related concepts

Managing your own data sets (Db2 Administration Guide)

Related tasks

Defining data sets (Db2 Administration Guide)

Related reference

Data set naming conventions (Db2 Administration Guide)

DSN1959I **BOTH FULLCOPY AND INCRCOPY PARAMETERS CANNOT BE SPECIFIED.**

Explanation

DSN1COPY cannot apply to both full images copies and incremental image copies in the same execution. The full image copies are applied first. Each incremental image copy must then be applied in separate steps, starting with the oldest incremental copy.

System action

Processing will terminate.

User response

Omit either FULLCOPY or INCRCOPY.

Severity

8 (error)

DSN1960I ***csect-name input/output*** **DATA SET ALLOCATION ERROR. ERROR FIELD IS ERRFIELD *value1*. INFORMATION FIELD IS INFFIELD *value2*.**

Explanation

The allocation of an input or output data set failed. The ERRFIELD *value1* contains the error number; the INFFIELD *value2* contains the information number. See SVC99 error codes in *z/OS MVS Diagnosis: Reference* or *z/OS MVS Programming: Authorized Assembler Services Guide* for help in determining the cause of the error.

System action

Processing terminates.

User response

Correct the cause of the allocation error and resubmit the job.

Severity

8 (error)

DSN1961I PIECE NUMBER value IS INVALID.

Explanation

A page was retrieved that has a piece number greater than NUMPARTS for partitioned table spaces or greater than the default of 32 for nonpartitioned table spaces. 'DPIECNUM value' is the piece number for the retrieved page. For page range printing, this message is issued if the starting page number has an invalid piece number as determined from calculations involving NUMPARTS and the page size.

System action

Processing will terminate.

User response

Look in SYSIBM.SYSTABLESPACE for the correct number of partitions for this page. Correct NUMPARTS or 32KB if they were specified incorrectly, resubmit the job with a valid image copy, or correct the starting page number for page range printing.

Severity

8 (error)

DSN1962I OUTPUT DATA SETS MUST BE VSAM WHEN IMAGE COPY DATA SETS ARE USED AS INPUT TO DSN1COPY.

Explanation

If image copy data sets are used as input to DSN1COPY, the output data sets must be VSAM. QSAM data sets cannot be used for output.

System action

Processing will terminate.

User response

Change the output data set to VSAM, or remove the FULLCOPY and NUMPARTS parameters.

Severity

8 (error)

DSN1963I ZERO PAGES ARE INVALID WHEN IMAGE COPY DATA SETS ARE USED AS INPUT TO STAND ALONE UTILITIES.

Explanation

A page in an IMAGE COPY data set has a zero header. Pages with zero headers are illegal if image copy data sets are used as input to stand-alone utilities.

System action

Processing continues.

User response

If the image copy data set name was invalid, look in SYSIBM.SYSCOPY for valid names. Resubmit the valid IMAGE COPY data set to the stand-alone utility. If the IMAGE COPY data set had a valid name, use the REPAIR utility to replace the zero pages with valid data pages.

Severity

4 (warning)

DSN1964I NO VALUE HAS BEEN SPECIFIED FOR THE NUMBER OF PARTITIONS.

Explanation

No value was given for the number of partitions. This value should follow the 'NUMPARTS' parameter.

System action

Processing will terminate.

User response

Look in SYSIBM.SYSTABLESPACE for the correct number of partitions for this page. Specify the correct number of partitions and resubmit the job. If the page is not partitioned, then either omit the NUMPARTS parameter or specify NUMPARTS as zero.

Severity

8 (error)

DSN1965I THE PARTITION NUMBER VALUE IS INVALID.

Explanation

The partition number value following the 'NUMPARTS' parameter is not between 1 and 64.

System action

Processing will terminate.

User response

Look in SYSIBM.SYSTABLESPACE for the correct number of partitions for this page.

Severity

8 (error)

DSN1966I OUTPUT DATA SET *odsname* NOT FOUND

Explanation

Db2 cannot find the output data set *odsname* because it has not yet been defined.

If DSN1COPY terminates and issues this message, DSN1COPY attempts to determine the correct target data set or data sets that affect the data set number. (The data set number is the last qualifier in the data set name. For example, the data set number in the data set DSNCAT.DSNDBD.TESTDB.TS01.I0001.A002 is A002.)

When DSN1COPY issues this message, *odsname* might be different than the output data set defined by SYSUT2. SYSUT1 can contain data that should be copied to data sets other than the one specified by SYSUT2. DSN1COPY does not define data sets, so the output data set must be defined before DSN1COPY is run.

System action

Processing is terminated.

User response

Use access method services to define *odsname* and any other VSAM data sets that have not yet been defined.

Severity

8 (error)

DSN1967I THE OBID ARRAYS ARE FULL

Explanation

More than 1000 records of OBIDs were specified in the SYSXLAT file.

System action

Processing stops.

Problem determination

DSN1COPY cannot be used for table spaces containing more than 1000 tables.

Severity

8 (error)

DSN1968I OBIDS SHOULD NOT BE DUPLICATED

Explanation

There should not be any repeated source OBIDs or target OBIDs within the SYSXLAT file.

System action

Processing is terminated.

User response

Change the SYSXLAT file.

Severity

8 (error)

DSN1969I SYSXLAT FILE CAN NOT BE OPENED

Explanation

The QSAM OPEN for the SYSXLAT file failed because no DD statement was provided.

System action

Processing is terminated.

System programmer response

Provide a SYSXLAT DD statement if OBID translate is to be done. Otherwise, remove the SYSXLAT parameter and rerun.

User response

Notify system programmer.

Problem determination

Follow standard QSAM diagnostic procedures.

Severity

8 (error)

DSN1970I DATA PAGE CONTAINING OBID xxxx, HAS NO MATCHING VALUE IN THE SYSXLAT FILE

Explanation

One of the OBID records of the SYSXLAT file contains a source OBID value that does not match the OBID value of the source system.

System action

Processing is terminated.

User response

Provide that record of the SYSXLAT file which contains an unmatched OBID value with an OBID that matches the OBID value of the source system.

This error can also be caused when an OBIDXLAT is attempted on an incremental image copy of a compressed segmented table space.

Severity

8 (error)

Related concepts

The effects of not specifying the OBIDXLAT option (Db2 Utilities)

Related reference

Syntax and options of the DSN1COPY control statement (Db2 Utilities)

DSN1971I DBID xxxx NOT FOUND IN THE SYSXLAT FILE. REPLACE SOURCE DBID xxxx OF THE SYSXLAT FILE WITH IT.

Explanation

The first record of the SYSXLAT file has the incorrect source DBID value.

System action

Processing is terminated.

User response

Provide the first record of the SYSXLAT file with a source DBID value which matches the DBID value of the source system.

Severity

8 (error)

DSN1972I PSID xxxx NOT FOUND IN THE SYSXLAT FILE REPLACE SOURCE DBID xxxx OF THE SYSXLAT FILE WITH IT

Explanation

The second record of the SYSXLAT file has the incorrect source PSID value.

System action

Processing is terminated.

User response

Provide the second record of the SYSXLAT file with the correct PSID value.

Severity

8 (error)

DSN1973I SOURCE DBID IS MISSING

Explanation

The first record of the SYSXLAT file contains no DBID value.

System action

Processing is terminated.

User response

Provide the first record of the SYSXLAT file with a pair of source and target DBID values which match the DBID values of the source and target systems.

Severity

8 (error)

DSN1974I TARGET DBID IS MISSING

Explanation

The first record of the SYSXLAT file contains no target DBID value.

System action

Processing is terminated.

User response

Provide the first record of the SYSXLAT file with a target DBID value which matches the DBID value of the target system.

Severity

8 (error)

DSN1975I SOURCE PSID IS MISSING

Explanation

The second record of the SYSXLAT file contains no PSID value.

System action

Processing is terminated.

User response

Provide the second record of the SYSXLAT file with a pair of source and target PSID values which match the PSID values of the source and target systems.

Severity

8 (error)

DSN1976I TARGET PSID IS MISSING

Explanation

The target PSID is missing from the second record of the SYSXLAT file.

System action

Processing is terminated.

User response

Provide the second record of the SYSXLAT file with a target PSID value which matches the PSID values of the target system.

Severity

8 (error)

DSN1977I SOURCE OBID IS MISSING

Explanation

There is a record in the SYSXLAT file with no OBID value.

System action

Processing is terminated.

User response

Correct the SYSXLAT file so that all the records following the first and second records will contain a pair of source and target OBID values.

Severity

8 (error)

DSN1978I TARGET OBID IS MISSING

Explanation

There is a record in the SYSXLAT file with no target OBID value specified.

System action

Processing is terminated.

User response

Provide the SYSXLAT file with an OBID value that matches the OBID value of the target system.

Severity

8 (error)

DSN1979I *csect-name* SOURCE & TARGET VALUES MUST BE WITHIN THE RANGE OF 1 TO 65535.

Explanation

The SOURCE and TARGET values of the SYSXLAT file must be between 1 and 65535.

System action

Processing is terminated.

User response

Provide the SYSXLAT file with values that are between 1 and 65535.

Severity

8 (error)

DSN1980I BROKEN PAGE BIT SET, WILL RESET AND RETRY BROKEN PAGE TEST

Explanation

This message indicates that a broken page was detected. If message DSN1990I is issued following this message, determine the cause of the broken page. If message DSN1990I is not issued, reset the broken page bit with the REPAIR utility to correct the problem. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

System action

Processing continues.

Operator response

Notify the system programmer.

System programmer response

Use either the RECOVER or REPAIR utility to correct the broken page. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Problem determination should have been done when the dump associated with the setting of the broken page bit was requested.

Severity

4 (warning)

DSN1981I INVALID PARAMETER FIELD: bad-parameter

Explanation

An invalid input parameter was detected on the EXEC statement. The parameter is either not a valid keyword or it has invalid subparameters associated with it.

Examples of invalid subparameters are:

- The NUMPARTS subparameter was other than '(nn)'. 'nn' is a decimal number.
- The NUMPARTS subparameter was missing either a left or right parenthesis.
- The PRINT subparameter was missing either a left or right parenthesis.
- The PRINT subparameter specified a digit in a page number which was not hexadecimal.
- The PRINT subparameter contained a starting page number that is larger than the ending page number.
- The PRINT subparameter contains a page number larger than six hexadecimal digits.

System action

Processing terminates.

User response

Correct the indicated parameter on the EXEC DD statement, and resubmit the job.

Problem determination

Refer to DSN1COPY, DSN1PRNT, or DSN1COMP documentation for parameter requirements.

Severity

8 (error)

DSN1982I NO BLANKS ARE ALLOWED WITHIN THE PARAMETER LIST

Explanation

There is a space or spaces between one or more parameters in the utility list.

System action

Processing is terminated.

User response

Check the parameter list and make sure that there are no spaces between any of the parameters.

Severity

8 (error)

DSN1983I *csect-name* DICTIONARY IS INVALID, REASON= X'*nnnn*'

Explanation

The dictionary found in the data set is invalid. A Db2 internal error occurred during the validation of the compression dictionary.

System action

Processing terminates.

System programmer response

Determine the failing environment. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

User response

Verify that the correct data set is specified. You can delete the EXPAND option and resubmit the job.

Problem determination

The REASON identifies the nature of the error. The REASON is used for diagnostic purposes by IBM Support.

Severity

8 (error)

DSN1984I **UNEXPECTED PAGE NUMBER, EXPECTING: *expected-page-number* FOUND: *page-number-found***

Explanation

This message indicates that an unexpected page number was encountered. This message might be received if the input data set is an image copy but you did not specify the FULLCOPY or INCRCOPY parameters. The page numbers displayed in hexadecimal format are the page numbers that are expected and found. After this message is issued five hundred times, it will stop being issued.

System action

Processing continues.

System programmer response

If running DSN1COPY use DSN1PRNT to dump the table space or index space. Otherwise, analyze the DSN1PRNT output. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

User response

Notify the system programmer.

Severity

4 (warning) for DSN1PRNT or 8 (error) for DSN1COPY

DSN1985I **ZERO PAGES ENCOUNTERED. FIRST PAGE = *first-zero-page-number*, LAST PAGE = *last-zero-page-number***

Explanation

One or more zero pages were found with valid data pages after them. A *zero page* is a page of all zeros or a page with only the page-synchronization bit on in the first and last byte of the page.

first-zero-page-number
The page number of the page where zeros were first found. This value is displayed in hexadecimal format.

last-zero-page-number
The page number of the page where zeros were last found. This value is displayed in hexadecimal format.

In most cases, this situation is not an error condition. This condition is normal for segmented table spaces and for index spaces that are created with a FREEPAGE value that is not equal to zero. This condition is also normal for nonsegmented table spaces after certain update scenarios terminated abnormally and data was rolled back.

System action

Processing continues.

System programmer response

If the zero page is the result of segmenting, no action is necessary. Similarly, if the zero page is a valid zero page that was introduced by Db2, no action is necessary. This page is free space and is used by Db2 when needed. If the zero page is a valid zero page and you want to remove it from the table space, run the REORG utility.

To help determine whether the zero page was validly introduced by Db2, run the CHECK INDEX utility. This action assumes that at least one index is defined on the affected table space.

If the zero page is determined to be invalid, run the RECOVER utility.

User response

Notify the system programmer.

Severity

4 (warning)

Related reference
CHECK INDEX (Db2 Utilities)
RECOVER (Db2 Utilities)
REORG TABLESPACE (Db2 Utilities)

DSN1986I **NEITHER FULLCOPY NOR INCRCOPY PARAMETERS MAY BE SPECIFIED WITH THE SEGMENT PARAMETER.**

Explanation

The parameters SEGMENT, FULLCOPY, and INCRCOPY describe the type of input that SYSUT1 references. SEGMENT is only relevant when a table space or index space is the input. FULLCOPY and INCRCOPY are only relevant when a image copy is the input. If the input data set is a segmented table space, then the FULLCOPY or INCRCOPY parameters should not be specified. If the input data set is a full or incremental image copy, then SEGMENT should not be specified.

System action

Processing will terminate.

User response

Omit the incorrect parameter.

Severity

8 (error)

DSN1987I ***csect-name*** **INDEX PAGE CONTAINING OBID *id* HAS NO MATCHING VALUE IN THE SYSXLAT FILE.**

Explanation

This message is issued when the OBID on the page does not find a matching value in the input source OBID list. This message can also be issued when the input does not have enough OBID values.

System action

Processing terminates with a dump of the page on which the OBID does not find a match in the source list.

User response

Resubmit the job with correct input OBID values.

Severity

8 (error)

DSN1988I ***csect-name*** **EXPAND KEYWORD IS SPECIFIED BUT DICTIONARY IS NOT FOUND**

Explanation

DSN1PRNT issues this message when the EXPAND option is specified. The dictionary was not found in the data set. An incorrect data set piece is specified or an incorrect data set number is specified for a multi-piece linear data set.

System action

Processing terminates.

User response

Resubmit the job specifying the correct keyword or the correct data set name.

Severity

8 (error)

DSN1989I ***csect-name*** **IS PROCESSED WITH THE FOLLOWING OPTIONS:**

Explanation

The indicated stand-alone utility is processing with the indicated options. These options were either specified or supplied by default.

csect-name
The name of the control section that issued the message.

The options include:

```
check/32K/fullcopy/incrcopy/segment/
numparts=n/format/expand/
print/value/obidxlat/reset/no check/4K/
no imagecopy/nonsegment/numparts=0/
no print/no value/no obidxlat/
no format/no reset/no expand
```

System action

Processing continues.

User response

Verify that the parameters are correct.

Severity

0 (informational)

Related concepts
Db2 stand-alone utilities (Db2 Utilities)

DSN1990I ***csect-name*** **BROKEN PAGE. PAGE NUMBER =** ***broken-page-number*****. REASON:** ***comment*****, SERVICE INFO: CODE =** ***c1, d1 = v1 ... dn = vn***

Explanation

During page checking, the page was detected as broken for the reason given in the message. The page number is displayed in hexadecimal format.

System action

Processing continues.

Operator response

Notify the system programmer.

System programmer response

Use either the RECOVER or REPAIR utility to correct the broken page.

Problem determination

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Service information is used for diagnostic purposes by the IBM Support.

Severity

4 (warning)

DSN1991I **UNCLUSTERED DATA DETECTED. RID: *record-ID* TABLE: *table-name* INDEX KEY: *key-name***

Explanation

The arrangement of data in one of the following Db2 catalog table spaces is not optimal for minimizing locking contention:

- SYSDBASE
- SYSPLAN
- SYSVIEWS

Data is not broken. Only the arrangement is affected.

record-ID
The record ID in the format 'xxxxxxxx'X for the duplicate record found.

table-name
The name of the table for which data is unclustered.

key-name
The index key that identifies the row that is unclustered.

Normally, data on these pages is arranged to minimize locking contention. DSN1COPY found that the arrangement of data no longer minimizes locking contention for the specified objects. Therefore, an increase in the number of deadlocks and timeouts may be seen on SYSDBASE, SYSPLAN, and SYSVIEWS.

System action

Processing continues.

Administrator response

Run the REORG TABLESPACE utility on the relevant catalog table space to rearrange the data.

DSN1992I **VSAM PUT ERROR, RPLERREG = *return-code*, RPLERRCD = *reason-code***

Explanation

VSAM PUT failed with the indicated error code.

System action

Processing terminates.

System programmer response

Follow standard VSAM diagnostic procedures. See *z/OS DFSMS: Macro Instructions for Data Sets* for more information on the standard VSAM procedures, the RPL fields, and the VSAM control blocks.

User response

Notify system programmer.

Severity

8 (error)

DSN1993I **DSN1COPY/DSN1PRNT/ DSN1COMP TERMINATED, *page-count* PAGES PROCESSED**

Explanation

This message indicates that a stand-alone utility has not successfully completed processing. The page count is displayed in decimal format.

System action

Processing terminates.

System programmer response

Correct the previous error and resubmit the job.

User response

Examine the previous error message of the application program.

Severity

8 (error)

DSN1994I **DSN1COPY/DSN1PRNT/ DSN1COMP COMPLETED SUCCESSFULLY, *page-count* PAGES PROCESSED**

Explanation

This message indicates that a stand-alone utility successfully completed processing. The page count is displayed in decimal format.

System action

Processing terminates.

Severity

0 (informational)

DSN1995I **VSAM GET ERROR, RPLERREG = *return-code*, RPLERRCD = *reason-code***

Explanation

VSAM GET failed with the indicated error code.

System action

Processing terminates.

System programmer response

Follow standard VSAM diagnostic procedures. See *z/OS DFSMS: Macro Instructions for Data Sets* for more information on the standard VSAM procedures, the RPL fields, and the VSAM control blocks.

User response

Notify system programmer.

Severity

8 (error)

DSN1996I **VSAM OPEN ERROR, ACBERRFLG = ACB *error-code*. OPEN *option***

Explanation

VSAM OPEN failed with the indicated 'ACB error-code'. The OPEN option was either 'INPUT' or 'OUTPUT'.

System action

Processing terminates if error code is greater than or equal to 128; otherwise, processing continues normally.

System programmer response

Follow standard VSAM diagnostic procedure. See *z/OS DFSMS: Macro Instructions for Data Sets* for more information on the standard VSAM procedures and the VSAM control blocks.

User response

Notify system programmer.

Severity

8 (error) if error is greater than or equal to 128; otherwise, severity code is 4.

DSN1997I **OUTPUT DSNAME = *data-set-name*, *data-set-type***

Explanation

The indicated 'data set name' is used for output. 'data set type' is either VSAM or SEQ (for sequential).

Severity

0 (informational)

DSN1998I **INPUT DSNAME = *data-set-name*, *data-set-type***

Explanation

The indicated 'data-set-name' is used for input. 'data-set-type' is either VSAM or SEQ (indicating sequential).

Severity

0 (informational)

DSN1999I **START OF DSN1COPY/ DSN1PRNT/DSN1COMP FOR JOB *job-name step-name***

Explanation

This message indicates that a stand-alone utility started processing.

System action

The stand-alone utility starts processing.

Severity

0 (informational).

Chapter 23. DSN3 messages

Message identifiers that begin with DSN3 communicate information about the subsystem support subcomponent.

DSN3001I ***csect-name*** **ABNORMAL DISCONNECT FROM SUBSYSTEM INTERFACE**

Explanation

This message indicates that 'csect-name' detected that an online routine was still supporting SSI calls (IEFSSREQ) even though Db2 was nearly done terminating or no longer executing. This occurs with 'csect-name' DSN3RS0Xwhen the service address space has reached end-of-memory and neither normal termination nor online error recovery routines have successfully completed termination of the Db2 subsystem. This occurs with 'csect-name' DSN3SSTM when this condition is discovered during online termination.

System action

The connection is terminated. All IEFSSREQ requests are handled by the Db2 ERLY code until Db2 is restarted.

Problem determination

An SVC dump is requested. This SVC dump and associated SYS1.LOGREC entries provide information to determine which resource managers had not removed their support of particular SSI function codes.

For dumps requested by DSN3RS0X,all pertinent control blocks and stack storage are dumped. The primary control block of interest is the SSVT for Db2.

For DSN3SSTM, the Db2 'standard dump' facility is used to dump the information necessary for problem diagnosis. The primary control blocks of interest are the 'active' CONN blocks.

DSN3002I **RECOVERY INCOMPLETE FOR connection-name**

Explanation

At least one Db2 unit of recovery (UR), related to an identified subsystem ('connection-name'), is still 'indoubt' after restart synchronization has taken place. ('Indoubt' URs are those for which commit has been voted by Db2 but which have not been acknowledged by 'connection-name'.)

This message may appear if the 'connection-name' subsystem has begun to do new work before having resolved all indoubt URs. The 'connection-name' subsystem may be in the process of resolving the indoubt URs.

System action

Resources held (locked) by these 'indoubt' URs are unavailable to any other work units until their status is resolved.

System programmer response

The system programmer and/or system administrator must determine the correct recovery action to resolve the 'indoubt' situations. This involves either 'ensure-commit' or 'backout' decisions for all 'indoubt' URs.

The -DISPLAY THREAD command should be used to see the URs still indoubt. It may show that all indoubt URs have already been resolved. The -RECOVER INDOUBT command should be used, either from an MVS console or through an attachment facility, to resolve the indoubt URs and to release the resources they hold.

Problem determination

This error is probably caused by a cold start after an abnormal termination of either subsystem or by offline alterations of the logs of either subsystem.

DSN3004I **DESCRIPTOR GET FAILURE RC=X xxxxxxxx, REASON=X xxxxxxxx**

Explanation

The parameter list required to create the Db2 agents under which IEFSSREQ calls are processed could not be obtained from the subsystem support subcomponent directory of internal parameters (DSN3DIR1). The RC indicates the return code received from the system parameter manager and REASON indicates the reason code (from register 0).

The return code is always 4 when this message is presented, indicating that the IEFSSREQ descriptor was not found in the subsystem support subcomponent directory. This is a system error and results in termination of the Db2 subsystem. The reason code is always 0.

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System action

Subsystem initialization is discontinued. Termination occurs.

System programmer response

Repair the master directory (DSNZPARM) and/or the Db2 program libraries, and restart the Db2 subsystem.

Problem determination

If the problem persists, use any dumps and the console log to diagnose the problem. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

DSN3006I xxxx SSI FUNCTION WAS ALREADY ACTIVE WHEN ACTIVATE WAS ATTEMPTED

Explanation

An initialization sequence error has occurred. The subsystem support for SSI services resource manager (SSSS) has discovered during its initialization that another resource manager ('xxxx') has already activated the EOM or FEOT SSI call by calling DSN3AC0X. If this occurs, the error is a serious one.

System action

Subsystem initialization is discontinued. Db2 termination occurs.

System programmer response

Ensure that all maintenance has been applied to the Db2 program libraries, and then restart the Db2 subsystem.

Problem determination

If the problem persists, use any dumps and the console log to diagnose the problem. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

DSN3007I xxxx SSI FUNCTION WAS ALREADY INACTIVE WHEN DEACTIVATE WAS ATTEMPTED

Explanation

A termination sequence error has occurred. The subsystem support for SSI services resource manager (SSSS) has discovered during its termination that another resource manager ('xxxx') has already deactivated the EOM or FEOT SSI call by calling DSN3AC0X. If this occurs, the error is a serious one.

System action

Termination continues.

System programmer response

Ensure that all maintenance has been applied to the Db2 program libraries.

Problem determination

If the problem persists, use any dumps and the console log to diagnose the problem. If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

DSN3008I *csect-name* ABNORMAL DISCONNECT FOR PROGRAM REQUEST HANDLER(S)

Explanation

This message indicates that 'csect-name' has discovered that one or more resource managers are still supporting application program calls through their program request handler, even though Db2 was almost done terminating or was no longer executing. This occurs when the system services address space has gone to end of memory and neither normal termination nor online error recovery routines have successfully completed termination of the Db2 subsystem.

System action

The program request handler (PRH) connection is terminated. All application program support requests are rejected with an indication that Db2 is not up.

System programmer response

See the Problem Determination section of this message.

Problem determination

An SVC dump is requested. This SVC dump and associated SYS1.LOGREC entries provide information to determine which resource managers were still supporting application program support calls. All pertinent control blocks and stack storage are dumped. The primary control block of interest is the program request handler block (PRHB).

DSN3010I ***csect-name*** **PARTICIPANT RRS IS COLD STARTING AND HAS LOST ITS LOG. OTHER RECOVERABLE RESOURCE MANAGERS MIGHT HAVE INDOUBT UNITS OF RECOVERY.**

Explanation

Db2 has coordinator responsibility for indoubt units of recovery and RRS has a participant role in the unit of recovery. RRS has cold started and has lost knowledge of indoubt units of recovery. There might be damage at RRS Recoverable Resource Managers that also participated in the unit of recovery.

System action

Processing continues.

System programmer response

Contact the database administrator.

Database Administrator Action: Db2 is the coordinator for one or more indoubt units of recovery at other RRS recoverable resource managers. RRS has lost all knowledge of these units of recovery. The participant RRS Recoverable Resource Managers might still have indoubt units of recovery. Db2 has no knowledge of other RRS Recoverable Resource Manager except for the RRS unit of recover ID (URID) that identifies such a unit of recovery. Subsequent DSN3017I, DSN3018I or DSN3019I messages describe the status of each unit of recovery and contain the RRS URID for each.

DSN3011I ***csect-name*** **COORDINATOR RRS IS COLD STARTING AND HAS LOST ITS LOG. INDOUBT DB2 THREADS NEED MANUAL RESOLUTION.**

Explanation

Db2 has participant responsibility for indoubt threads. RRS, the commit coordinator, has informed Db2 that it lost all knowledge of Db2 indoubt threads. The indoubt threads at this Db2 must be manually resolved with the RECOVER INDOUBT command.

System action

Processing continues.

System programmer response

Contact the database administrator.

Database Administrator Action: Db2 is a participant with one or more indoubt threads. The coordinator is RRS. RRS has lost knowledge of the indoubt Db2 threads. A list of indoubt threads where RRS is the coordinator can be displayed using the DISPLAY THREAD command for indoubt type threads by specifying RRSAF as the connection name. A DSNV408I message with coordinator = RRSAF identifies a thread of this type. The DSNV449I message in the DISPLAY THREAD report that follows contains the RRS unit of recovery ID (URID) that identifies the RRS unit of recovery in the NID field.

The heuristic decision (that is, to commit or abort the logical unit of work) should be coordinated with any other participant RRS Recoverable Resource Managers. The existence of other participants might not be easy to determine. The information might be available in the MVS/RRS recovery log even though information has been lost.

At this Db2, all indoubt threads coordinated by the RRS must be resolved with the RECOVER INDOUBT command. Locked data remains unavailable until resolution. Threads that were already resolved with this command are discarded. Threads not yet resolved are discarded after resolution with the command.

The commit or abort decision provided using the RECOVER INDOUBT command for a logical unit of work are propagated to all downstream participants, if any.

DSN3012I ***csect-name*** **DB2 WAS RESTARTED ON THE WRONG SYSTEM AND CANNOT CONNECT TO RRS. THERE ARE UNRESOLVED UNITS OF RECOVERY WHERE DB2 IS THE COORDINATOR.**

Explanation

Db2 is the commit coordinator for one or more indoubt units of recovery. Db2 is unable to connect to RRS to resolve these indoubt units of recovery.

System action

Processing continues.

Operator response

Use the RRS IPCS interface to determine the correct system and restart Db2 on that system.

DSN3013I ***csect-name*** **DB2 WAS RESTARTED ON THE WRONG SYSTEM AND CANNOT CONNECT TO RRS. THERE ARE UNRESOLVED UNITS OF RECOVERY WHERE DB2 IS A PARTICIPANT.**

Explanation

Db2 has one or more indoubt threads and is unable to connect to RRS to resolve these indoubt units of recovery.

System action

Processing continues.

Operator response

Use the RRS IPCS interface to determine the correct system and restart Db2 on that system.

DSN3014I ***csect-name*** **DB2 HAS NO KNOWLEDGE OF RRS URID=*rrs_urid*. THE RRS UR IS INDOUBT. THE DB2 URID RECORDED BY RRS=*db2_urid*.**

Explanation

Db2 is restarting with RRS where Db2 is a participant and RRS is the coordinator. RRS has a unit of recovery that Db2 should be a participant in, but Db2 has no knowledge of the RRS unit of recovery. The RRS unit of recovery ID is 'rrs_urid'. RRS has recorded the Db2 unit of recovery ID as 'db2_urid'.

System action

Restart with RRS continues.

Operator response

Notify the database administrator.

Database Administrator Action: This message might indicate a Db2 or RRS problem, or it might be produced normally because one of the following prior actions:

- A Db2 conditional restart was performed that resulted in the loss of part or all of the Db2 log. This conditional restart might have happened at any time in the past.
- The Db2 RECOVER INDOUBT command was used to resolve the Db2 unit of recovery with URID 'db2_urid'.

If either of these occurred, the message can be ignored. If neither occurred, there might be a Db2 or an RRS problem. If the 'db2_urid' appears to be a valid log RBA, use the DSN1LOGP utility with the SUMMARY option and URID options using the 'db2-urid' value. If DSN1LOGP finds the 'db2-urid', the disposition will indicate whether the Db2 UR was committed or aborted (rolled back). If possible, use the RRS ISPF interface to commit or abort the RRS URID to avoid heuristic damage.

Problem determination

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Listing of Db2 log output.
- Db2 log output, including any Db2 recovery log archive tapes.
- Copy of the log for this period, so that additional DSN1LOGP reports can be produced for problem determination.

.

DSN3015I ***csect-name*** **DB2 HAS NO KNOWLEDGE OF RRS URID=*rrs_urid*. THE RRS UR IS INDOUBT. THE DB2 URID RECORDED BY RRS=*db2_urid*.**

Explanation

Db2 is restarting with RRS where Db2 is the coordinator and RRS is the participant. RRS has a unit of recovery that Db2 should be the coordinator of, but Db2 has no knowledge of the RRS unit of recovery. The RRS unit of recovery ID is 'rrs_urid'. RRS has recorded the Db2 unit of recovery ID as 'db2_urid'.

System action

Restart with RRS continues.

Operator response

Notify the database administrator.

Database Administrator Action: This message might indicate a Db2 or RRS problem, or it might be produced normally because a Db2 conditional restart was performed that resulted in the loss of part or all of the Db2 log. This conditional restart might have happened at any time in the past.

If the 'db2_urid' appears to be a valid log RBA, use the DSN1LOGP utility with the SUMMARY option and URID options using the 'db2-urid' value. If DSN1LOGP finds the 'db2-urid', the disposition will indicate whether the Db2 UR was committed or aborted (rolled back). Use the RRS ISPF interface to commit or abort the RRS URID to avoid heuristic damage.

Problem determination

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Listing of Db2 log output.
- Db2 log output, including any Db2 recovery log archive tapes.
- Copy of the log for this period, so that additional DSN1LOGP reports can be produced for problem determination.

.

DSN3016I ***csect-name*** **RRS HAS LOST DATA FROM ITS LOG.**

Explanation

Db2 is restarting with RRS and RRS has lost some portion of its log.

System action

Restart with RRS continues.

Operator response

Notify the database administrator.

Database Administrator Action: Db2 might not be able to resolve indoubt Units of Recovery successfully with RRS because of the loss of RRS log data. This message might be followed by one or more of the following messages: DSN3017I, DSN3018I, DSN3019I, DSN3020I, DSN3021I, DSN3022I and DSN3023I.

DSN3017I ***csect-name*** **RRS HAS NO KNOWLEDGE OF DB2 URID=*db2_urid*. THE DB2 UR IS INDOUBT. THE RRS URID RECORDED BY DB2=*rrs_urid*.**

Explanation

Db2 is restarting with RRS where Db2 is the coordinator and RRS is a participant. Db2 has a unit of recovery that RRS should be a participant in, but RRS has no knowledge of the Db2 unit of recovery. The Db2 unit of recovery ID is 'db2_urid'. Db2 has recorded the RRS unit of recovery ID as 'rrs_urid'.

System action

Restart with RRS continues.

Operator response

Notify the database administrator.

Database Administrator Action: This message might indicate a Db2 or RRS problem, or it might be produced normally because of one of the following:

- An RRS cold start was performed that resulted in the loss of the RRS log. In this case, message DSN3010I should have been produced.
- RRS might have had a partial loss of log data during restart. In this case, message DSN3016I should have been produced.
- The RRS ISPF interface might have been used to heuristically commit or roll back the UR.

If any of the above are true, the message can be ignored. If not, there might be a Db2 or an RRS problem.

Problem determination

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Listing of Db2 log output.
- Db2 log output, including any Db2 recovery log archive tapes.
- Copy of the log for this period, so that additional DSN1LOGP reports can be produced for problem determination.

.

DSN3018I ***csect-name*** **RRS HAS NO KNOWLEDGE OF DB2 URID=*db2_urid*. THE DB2 UR WAS COMMITTED. THE RRS URID RECORDED BY DB2=*rrs_urid*.**

Explanation

Db2 is restarting with RRS where Db2 is the coordinator and RRS is a participant. Db2 has a unit of recovery that RRS should be a participant in, but RRS has no knowledge of the Db2 unit of recovery. The Db2 unit of recovery ID is 'db2_urid'. Db2 has recorded the RRS unit of recovery ID as 'rrs_urid'.

System action

Restart with RRS continues.

Operator response

Notify the database administrator.

Database Administrator Action: This message might indicate a Db2 or RRS problem, or it might be produced normally because of one of the following:

- An RRS cold start was performed that resulted in the loss of the RRS log. In this case, message DSN3010I should have been produced.
- RRS might have had a partial loss of log data during restart. In this case, message DSN3016I should have been produced.
- The RRS ISPF interface might have been used to heuristically commit or roll back the UR.

If any of the above are true, the message can be ignored. If not, there might be a Db2 or an RRS problem.

Problem determination

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Listing of Db2 log output.
- Db2 log output, including any Db2 recovery log archive tapes.
- Copy of the log for this period, so that additional DSN1LOGP reports can be produced for problem determination.

.

DSN3019I ***csect-name*** **RRS HAS NO KNOWLEDGE OF DB2 URID=*db2_urid*. THE DB2 UR WAS ROLLED BACK. THE RRS URID RECORDED BY DB2=*rrs_urid*.**

Explanation

Db2 is restarting with RRS where Db2 is the coordinator and RRS is a participant. Db2 has a unit of recovery that RRS should be a participant in, but RRS has no knowledge of the Db2 unit of recovery. The Db2 unit of recovery ID is 'db2_urid'. Db2 has recorded the RRS unit of recovery ID as 'rrs_urid'.

System action

Restart with RRS continues.

Operator response

Notify the database administrator.

Database Administrator Action: This message might indicate a Db2 or RRS problem, or it might be produced normally because of one of the following:

- An RRS cold start was performed that resulted in the loss of the RRS log. In this case, message DSN3010I should have been produced.
- RRS might have had a partial loss of log data during restart. In this case, message DSN3016I should have been produced.
- The RRS ISPF interface might have been used to heuristically commit or roll back the UR.

If any of the above are true, the message can be ignored. If not, there might be a Db2 or an RRS problem.

Problem determination

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Listing of Db2 log output.
- Db2 log output, including any Db2 recovery log archive tapes.
- Copy of the log for this period, so that additional DSN1LOGP reports can be produced for problem determination.

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DSN3020I ***csect-name*** **POSSIBLE HEURISTIC DAMAGE. RRS HAS COMMITTED THE UR WITH RRS URID=*rrs_urid*. THE DB2 UR WITH DB2 URID=*db2_urid* IS INDOUBT.**

Explanation

Db2 is restarting with RRS and has a unit of recovery (UR) Db2 URID=db2_urid that is indoubt. Db2 is the commit coordinator for the UR and RRS is a participant. RRS has committed the same UR. The RRS URID=rrs_urid.

System action

Restart with RRS continues.

Operator response

Notify the database administrator.

Database Administrator Action: If possible, ensure that the Db2 UR is resolved to commit. If this is done, there will be no heuristic damage. If the Db2 UR is resolved to abort, heuristic damage will have occurred since RRS committed the same UR.

DSN3021I ***csect-name*** **POSSIBLE HEURISTIC DAMAGE. RRS HAS ROLLED BACK THE UR WITH RRS. URID=*rrs_urid*. THE DB2 UR WITH DB2 URID=*db2_urid* IS INDOUBT.**

Explanation

Db2 is restarting with RRS and has a unit of recovery (UR) Db2 URID=db2_urid that is indoubt. Db2 is the commit coordinator for the UR and RRS is a participant. RRS has rolled back the same UR. The RRS URID=rrs_urid.

System action

Restart with RRS continues.

Operator response

Notify the database administrator.

Database Administrator Action: If possible, ensure that the Db2 UR is resolved to abort. If this is done, there will be no heuristic damage. If the Db2 UR is resolved to commit, heuristic damage will have occurred since RRS rolled back the same UR.

DSN3022I ***csect-name*** **HEURISTIC DAMAGE HAS OCCURRED. RRS HAS COMMITTED THE UR WITH RRS URID=*rrs_urid*, AND DB2 HAS ROLLED BACK THE SAME UR. THE DB2 URID=*db2_urid***

Explanation

Db2 is restarting with RRS and has a unit of recovery (UR) with Db2 URID=db2_urid that was rolled back. Db2 is the commit coordinator for the UR and RRS is a participant. RRS has committed the same UR. The RRS URID=rrs_urid.

System action

Restart with RRS continues.

Operator response

Notify the database administrator.

Database Administrator Action: Heuristic damage has occurred since Db2 rolled back the UR and RRS has committed the same UR. Correct the damage. This is not an easy task. Knowledge of the application is required to determine which Recoverable Resource Managers are involved in the UR. Since the time of the heuristic action, the data that was updated might have been used by many applications - read and/or write. Correcting the damage might involve reversing the effects of these applications as well. Tools available are:

- The RRS ISPF functions can provide assistance in determining the set of resource managers involved and what action they took.
- The Db2 DSN1LOGP utility provides a summary report that identifies the table spaces modified by the unit of recovery.

Contact your IBM Support Center for further assistance.

DSN3023I ***csect-name*** **HEURISTIC DAMAGE HAS OCCURRED. RRS HAS ROLLED BACK THE UR WITH RRS URID=*rrs_urid*, AND DB2 HAS COMMITTED THE SAME UR. THE DB2 URID=*db2_urid***

Explanation

Db2 is restarting with RRS and has a unit of recovery (UR) with Db2 URID=db2_urid that was committed. Db2 is the commit coordinator for the UR and RRS is a participant. RRS has rolled back the same UR. The RRS URID=rrs_urid.

System action

Restart with RRS continues.

Operator response

Notify the database administrator.

Database Administrator Action: Heuristic damage has occurred since Db2 committed the UR and RRS has rolled back the same UR. Correct the damage. This is not an easy task. Knowledge of the application is required to determine which Recoverable Resource Managers are involved in the UR. Since the time of the heuristic action, the data that was updated might have been used by many applications - read and/or write. Correcting the damage might involve reversing the effects of these applications as well. Tools available are:

- The RRS ISPF functions can provide assistance in determining the set of resource managers involved and what action they took.
- The Db2 DSN1LOGP utility provides a summary report that identifies the table spaces modified by the unit of recovery.

Contact your IBM Support Center for further assistance.

DSN3024I ***csect_name*** **HEURISTIC DAMAGE HAS OCCURRED. COORDINATOR DB2 HAS COMMITTED THE UR WITH DB2 URID=*db2_urid*, AND RRS HAS INDICATED THAT THE OUTCOME WAS MIXED. THE RRS URID=*rrs_urid*.**

Explanation

Db2 is the commit coordinator and RRS is a participant. Db2 committed the UR with URID = *db2_urid* and RRS has indicated that one or more Recoverable Resource Managers that participated in the RRS UR with URID = *rrs_urid* has rolled back the same UR.

System action

Processing continues.

Operator response

Notify the database administrator.

Database Administrator Action: Heuristic damage has occurred since Db2 committed the UR and at least one RRS Recoverable Resource manager has rolled back the same UR. Correct the damage. This is not an easy task. Knowledge of the application is required to determine which Recoverable Resource Managers are involved in the UR. Since the time of the heuristic action, the data that was updated might have been used by many applications - read and/or write. Correcting the damage might involve reversing the effects of these applications as well. Tools available are:

- The RRS ISPF functions can provide assistance in determining the set of resource managers involved and what action they took.
- The Db2 DSN1LOGP utility provides a summary report that identifies the table spaces modified by the unit of recovery.

Contact your IBM Support Center for further assistance.

DSN3025I ***csect-name*** **HEURISTIC DAMAGE HAS OCCURRED. COORDINATOR DB2 HAS ROLLED BACK THE UR WITH DB2 URID=*db2_urid*, AND RRS HAS INDICATED THE OUTCOME WAS MIXED. THE RRS URID=*rrs_urid*.**

Explanation

Db2 is the commit coordinator and RRS is a participant. Db2 rolled back the UR with URID = *db2_urid* and RRS has indicated that one or more Recoverable Resource Managers that participated in the RRS UR with URID = *rrs_urid* has committed the same UR.

System action

Processing continues.

Operator response

Notify the database administrator.

Database Administrator Action: Heuristic damage has occurred since Db2 rolled back the UR and at least one RRS Recoverable Resource manager has committed the same UR. Correct the damage. This is not an easy task. Knowledge of the application is required to determine which Recoverable Resource Managers are involved in the UR. Since the time of the heuristic action, the data that was updated might have been used by many applications - read and/or write. Correcting the damage might involve reversing the effects of these applications as well. Tools available are:

- The RRS ISPF functions can provide assistance in determining the set of resource managers involved and what action they took.
- The Db2 DSN1LOGP utility provides a summary report that identifies the table spaces modified by the unit of recovery.

Contact IBM Support for further assistance.

DSN3026I ***csect-name*** **POSSIBLE HEURISTIC DAMAGE. COORDINATOR DB2 HAS COMMITTED THE UR WITH DB2 URID=*db2_urid*, AND RRS HAS INDICATED THAT THE OUTCOME IS PENDING. THE RRS URID=*rrs_urid*.**

Explanation

Db2 is the commit coordinator for the Db2 UR with URID=*db2_urid* and RRS is a participant. RRS has also committed the UR but has indicated that at least one RRS Recoverable Resource manager has not

completed commit processing for the RRS UR with URID=*rrs_urid*.

System action

Processing continues.

Operator response

Notify the database administrator.

Database Administrator Action: If possible, ensure that the RRS Recoverable Resource Manager commits the RRS UR. If this is done, there will be no heuristic damage. If the RRS UR is rolled back by the RRS Recoverable Resource manager, heuristic damage will have occurred since Db2 committed the same UR.

DSN3027I ***csect-name*** **POSSIBLE HEURISTIC DAMAGE. COORDINATOR DB2 HAS ROLLED BACK THE UR WITH DB2 URID=*db2_urid*, AND RRS HAS INDICATED THAT THE OUTCOME IS PENDING. THE RRS URID=*rrs_urid*.**

Explanation

Db2 is the commit coordinator for the Db2 UR with URID=*db2_urid* and RRS is a participant. RRS has also rolled back the UR but has indicated that at least one RRS Recoverable Resource manager has not completed roll back processing for the RRS UR with URID=*rrs_urid*.

System action

Processing continues.

Operator response

Notify the database administrator.

Database Administrator Action: If possible, ensure that the RRS Recoverable Resource Manager rolls back the RRS UR. If this is done, there will be no heuristic damage. If the RRS UR is committed by the RRS Recoverable Resource manager, heuristic damage will have occurred since Db2 rolled back the same UR.

DSN3028I ***csect-name action-1*** **CANNOT BE PERFORMED ON A UR BECAUSE THE UR IS IN A GLOBAL TRANSACTION, AND THE STATE OF THE GLOBAL TRANSACTION IS *action-2*. *action-2* IS PERFORMED. URID = *rba* CONNECTION NAME = *connid* CORRELATION ID = *corrid* LUWID = *logical-unit-of-work-ID* = *token***

Explanation

A -RECOVER INDOUBT command was issued for a Unit of Recovery (UR) that was part of a global transaction. The recover action is inconsistent with the state of the global transaction. The requested recover action *action-1* is being changed to *action-2* to preserve the integrity of the global transaction. URID is the beginning RBA of the UR. The combination of Connection Name, Correlation ID, and LUWID identify the thread associated with the UR.

System action

The indoubt Unit of Recovery is resolved to *action-2*.

DSN3029I ***csect-name*** **RRS ATTACH PROCESSING IS AVAILABLE.**

Explanation

RRSAF has finished synchronizing with z/OS RRS and is now available to process application calls.

System action

Processing continues.

Operator response

Applications that require RRSAF services can be started.

DSN3030I ***csect-name*** **RRS ATTACH WAITING FOR Z/OS RRS INITIALIZATION, RRS CALL=*rrs-function*, RRS RETURN CODE=X'*rrs-return*'**

Explanation

The Db2 Resource Recovery Services Attachment Facility (RRSAF) could not establish a connection to z/OS RRS because RRS is not available.

csect-name
The name of the control section that issued the message.

rrs-function
The RRS request that is failing.

rrs-return
The z/OS RRS return code issued by the failing request.

System action

RRSAF functions, stored procedures (except for native SQL procedures), and user-defined functions are not available on this Db2 subsystem.

Operator response

Start z/OS RRS. When z/OS RRS is started, Db2 RRSAF should automatically connect and resync with z/OS RRS, and RRSAF functions, stored procedures, and user defined functions become available.

If it will not start, notify the system programmer, and provide the information in this message.

System programmer response

Use the z/OS RRS return code provided in the message to determine why RRS has not started.

Related reference

z/OS MVS Programming: Resource Recovery

DSN3031I ***csect-name*** **RRS ATTACH INITIALIZATION FAILED, RRS CALL=*rrs-function*, RRS RETURN CODE=X'*rrs-return*'**

Explanation

The Db2 Resource Recovery Services Attachment Facility (RRSAF) could not establish a connection to z/OS RRS because an error code was returned by an RRS function.

csect-name
The name of the control section that issued the message.

rrsaf-function
The RRS request that is failing.

rrs-return
The z/OS RRS return code issued by the failing request.

System action

A record is written to SYS1.LOGREC, and an SVC dump is generated for Db2 reason code 00F30095.

RRSAF functions, stored procedures (except for native SQL procedures), and user-defined functions are not available on this Db2 subsystem.

Operator response

Notify the system programmer, and provide the information in this message.

System programmer response

Use the z/OS RRS return code provided in the message to determine why RRS has not started. If the problem persists, contact IBM Support

When z/OS RRS is started, Db2 RRSAF should automatically connect and resync with z/OS RRS, and RRSAF functions, stored procedures, and user defined functions become available.

Related reference

z/OS MVS Programming: Resource Recovery

Related information

00F30095 (Db2 Codes)

DSN3100I ***src csect-name*** **- SUBSYSTEM** ***ssnm*** **READY FOR START COMMAND**

Explanation

This message indicates that a Db2 subsystem is ready to be started.

src
The Db2 command prefix.

csect-name
The name of the control section that issued the message.

ssnm
The Db2 subsystem name.

This message occurs during MVS IPL processing. Message DSN3104I is also issued during this processing.

If the IRMLAUT subsystem parameter is set to YES, and this message is used as a trigger for automation to restart Db2, a DELAY must be programmed into the automation to allow time for the IRLM to process the termination, and issue the **STOP IRLM** command. Another approach is to monitor for both the Db2 termination and the IRLM termination in combination, before restarting Db2. If neither of these actions are done, Db2 might identify to the existing IRLM and cannot stop automatically from that point onward.

Operator response

Issue the -START DB2 command when you are ready to start Db2.

Related tasks

Starting Db2 (Db2 Administration Guide)

Related reference

-START DB2 (Db2) (Db2 Commands)

AUTO START field (IRLMAUT subsystem parameter) (Db2 Installation and Migration)

DSN3101I ***csect-name*** **INVALID EARLY PROCESSING MODULE NAME IN PARMLIB RECORD. *ssnm* IS NOT AVAILABLE**

Explanation

CSECT DSN3UR00 has discovered that a parameter passed to Db2 subsystem initialization is in error. Either the Early processing load module name is not between 1 and 8 characters long, or there are syntax errors in the parameter string. The entire parameter string must be between 3 and 10 characters long, and the next to the last character must be a ','. The parameters were obtained from the parameter fields of a record defining a Db2 subsystem in member IEFSSNxx of SYS1.PARMLIB.

The subsystem recognition character is not inserted in this message as it is not yet known. 'ssnm' is the name of the Db2 subsystem undergoing IPL-time initialization.

System action

The Db2 subsystem with the indicated name is not available for this IPL of MVS.

Operator response

Notify the system programmer.

System programmer response

Correct the parameter fields in the record of SYS1.PARMLIB member IEFSSNxx, and re-IPL MVS.

Related tasks

Registering the command prefixes, member group attachment name, and subgroup attachment name (Db2 Installation and Migration)

Related reference

DSNTIPM: MVS PARMLIB updates panel (Db2 Installation and Migration)

DSN3102I ***csect-name*** **INVALID SUBSYSTEM RECOGNITION CHARACTER IN PARMLIB RECORD.** ***ssnm*** **IS NOT AVAILABLE**

Explanation

CSECT DSN3UR00 detected that the subsystem recognition character is invalid; it must be nonblank. The subsystem recognition character is the last field of the parameter string passed to Db2 IPL initialization. It is obtained from a record for the named subsystem in member IEFSSNxx of SYS1.PARMLIB.

The subsystem recognition character is not inserted in this message as it cannot be determined. 'ssnm' is the name of the Db2 subsystem undergoing IPL-time initialization.

System action

The Db2 subsystem with the indicated name is not available for this IPL of MVS.

Operator response

Notify the system programmer. Correct the parameter fields in the SYS1.PARMLIB record of member IEFSSNxx, and re-IPL MVS.

Related tasks

Registering the command prefixes, member group attachment name, and subgroup attachment name (Db2 Installation and Migration)

Related reference

DSNTIPM: MVS PARMLIB updates panel (Db2 Installation and Migration)

DSN3103I ***csect-name*** **- UNABLE TO LOAD EARLY PROCESSING MODULE SPECIFIED IN PARMLIB RECORD.** ***ssnm*** **IS NOT AVAILABLE**

Explanation

CSECT DSN3UR00 is unable to load the early processing load module named in the first parameter passed to Db2 subsystem IPL initialization. 'ssnm' is the name of the Db2 subsystem undergoing IPL-time initialization.

Either the load module name was specified incorrectly or the load module does not reside in a library included in the MVS linklist.

System action

DSN3UR00 abends with code X'04E' and reason code X'00F30103'. The Db2 subsystem with the indicated name is not available for this IPL of MVS.

Operator response

Notify the system programmer.

System programmer response

Identify the cause of the error. Either correct the early processing load module or take the necessary steps to include the module in a link-listed library. Re-IPL MVS. Refer to the appropriate MVS publication for MVS linklist requirements.

Problem determination

An entry is made to SYS1.LOGREC. No SVC dump is taken.

Related tasks

Registering the command prefixes, member group attachment name, and subgroup attachment name (Db2 Installation and Migration)

Related reference

DSNTIPM: MVS PARMLIB updates panel (Db2 Installation and Migration)

DSN3104I ***csect-name*** **- TERMINATION COMPLETE**

Explanation

This message indicates that a Db2 subsystem has terminated. The actual MVS termination of the Db2 address space(s) may have completed earlier. This message is presented for every termination, normal or abnormal.

Operator response

Issue a DISPLAY ACTIVE command to see if MVS has completed termination processing of the address space(s).

DSN3105I ***csect-name*** **- UNABLE TO LOAD EARLY PROCESSING MODULE 'DSN3EPX'** ***ssnm*** **IS NOT AVAILABLE**

Explanation

CSECT DSN3UR00 is unable to load the early processing module DSN3EPX required for MVS. The name of the Db2 subsystem undergoing IPL-time initialization is 'ssnm'. Either the load module has been inadvertently deleted, or does not reside in a library included in the MVS linklist.

System action

DSN3UR00 abends with code X'04E' and reason code X'00F30105'. Db2 subsystem 'ssnm' is not available for this IPL of MVS.

Operator response

Notify the system programmer.

System programmer response

Identify the cause of the error. Either correct the early processing load module or take the necessary steps to include the module in a link-listed library. Re-IPL MVS.

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Problem determination

An entry is made in SYS1.LOGREC. No SVC dump is taken. Refer to MVS linklist requirements in *MVS/ESA JES2 Initialization and Tuning Guide*.

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

DSN3106I ***csect-name*** **SUBSYSTEM STOPPED. THIS COMMAND NOT PROCESSED:** ***command-text***

Explanation

A command has been received which cannot be processed due to one of the following:

- The Db2 subsystem has not been started.
- The command was queued for processing while Db2 was starting, but startup terminated with an error.
- Db2 terminated before the command could be processed.

System action

The command is not processed.

Operator response

Start the Db2 subsystem, then reenter the command.

DSN3107I ***csect-name*** **COMMAND REJECTED. REQUESTER NOT AUTHORIZED**

Explanation

CSECT DSN3EC0X has discovered that the source of the command was a console that does not have 'system' authority.

System action

The command is not processed. This message is sent to the console that entered the command.

Operator response

Enter the command from another console that has 'system' authority.

System programmer response

Verify that this console should be used for entering Db2 commands. If so, authorize it for 'system' commands by using MVS services.

DSN3108I ***csect-name*** **COMMAND REJECTED. COMMAND FACILITY PATH UNAVAILABLE**

Explanation

CSECT DSN3EC0X has discovered that the path from MVS consoles to the Db2 command processor is unavailable. It may still be possible to enter commands through one of the attachment facilities.

System action

The command is not processed. This message is delivered to the console that entered the command.

System programmer response

The console command facility is available again the next time Db2 is started. If it is necessary to regain this facility immediately, Db2 should be canceled and restarted.

DSN3109I ***csect-name*** **- UNABLE TO OBTAIN SUBSYSTEM AFFINITY TABLE INDEX FOR SUBSYSTEM *ssnm*. IEFSSREQ RC = *nn***

Explanation

CSECT DSN3UR00 was unable to obtain a subsystem affinity table index for the named subsystem. MVS did not recognize the named subsystem name as a known subsystem. If this message is issued, a serious error has occurred in MVS or Db2.

In the message, 'nn' is the return code from the IEFSSREQ MVS service. 'ssnm' is the name of the Db2 subsystem undergoing IPL-time initialization.

System action

DSN3UR00 abends with completion code X'04E' and reason code X'00F30104'. The Db2 subsystem with the indicated name is not available for this IPL of MVS.

Operator response

Notify the system programmer.

System programmer response

Try to re-IPL. If the problem persists, follow standard Db2 problem reporting procedures.

Problem determination

A record is written to SYS1.LOGREC. No SVC dump is taken. Return codes from IEFSSREQ are documented under control block SSOB in the appropriate MVS publication.

DSN3111I ***csect-name*** **LOAD MODULE *module-name* DOES NOT HAVE AMODE(31) ATTRIBUTE. *ssnm* IS NOT AVAILABLE**

Explanation

The Db2 program which establishes Db2 as an MVS subsystem during z/OS master scheduler initialization has determined that either its own load module or a load module loaded by it does not have the linkage editor attributes AMODE(31) and RMODE(ANY). Most Db2 load modules must be capable of running in the 31-bit addressing mode.

In the message, *csect-name* is the name of the program detecting the error, 'module-name' is the name of the first load module found with an invalid AMODE attribute, and 'ssnm' is the name of the Db2 subsystem undergoing IPL-time initialization.

System action

Program DSN3UR00 abends with a code of X'04E' and a reason code of X'00F30111'. The Db2 subsystem named *ssnm* is not initialized. The subsystem will not be available until the error is corrected and MVS is re-IPLed.

Operator response

Notify the system programmer of the failure.

System programmer response

Verify that all of the following were done:

- The installation and maintenance activities against Db2 were executed using SMP.
- The JCLIN for SMP included the correct AMODE and RMODE control statements.
- The appropriate Linkage Editor provided with the Data Facility Product (DFP) for the version of MVS being used was invoked by SMP for the link-edit steps.

Correct and rerun the procedure or JCL which caused the error. If necessary, REJECT all SMP APPLY steps which were executed incorrectly and rerun the rejected steps. Request a re-IPL of MVS.

Problem determination

A record is written to SYS1.LOGREC. No SVC dump is taken.

The MVS service aid AMBLIST provides Linkage Editor module attributes in the summary section of the LISTLOAD function output.

DSN3112I ***csect-name*** **UNABLE TO REGISTER COMMAND PREFIX, CPF RETURN CODE =** ***xxyy*****.** ***ssnm*** **IS NOT AVAILABLE**

Explanation

Db2 is unable to register the installation-specified command prefix with MVS. The command prefix is specified in the subsystem definition parameter in SYS1.PARMLIB(IEFSSN*nn*). *xx* is the hexadecimal return code, and *yy* is the hexadecimal reason code from the command prefix facility (CPF) of MVS.

System action

The Db2 subsystem, *ssnm*, is not available.

System programmer response

Use the information listed for REQUEST=DEFINE in CPF macro return and reason codes (MVS Programming Assembler Services Reference) to identify the cause of the error and determine what to do. Find the specific combination of return code (*xx*) and reason code (*yy*) that identifies the meaning of the error and the suggested action.

Ensure that the specified command prefix is not already registered, or is not a substring or superstring of an already registered command prefix. Use the MVS DISPLAY OPDATA command, if necessary, to see command prefixes registered with MVS.

Related reference

z/OS OPDATA command (MVS System Commands)

DSN3113I ***csect-name*** **INVALID SUBSYSTEM DEFINITION PARAMETER IN PARMLIB RECORD.** ***ssnm*** **IS NOT AVAILABLE.**

Explanation

Db2 detected an error in the subsystem definition parameter, which is obtained from the IEFSSNxx member of SYS1.PARMLIB. Some possible causes for this error are:

- The early processing load module name is not between 1 and 8 characters long.
- The command prefix is not between 1 and 8 characters long.
- The command prefix scope is not 1 character long.
- The command prefix scope is not X, S, or M.
- The group attach name is not between 1 and 4 characters long.

The command prefix is not inserted into this message because it is unknown. The name of the subsystem attempting to initialize is *ssnm*.

System action

The Db2 subsystem is not available.

System programmer response

Correct the subsystem definition parameter and re-IPL MVS.

Related tasks

Registering the command prefixes, member group attachment name, and subgroup attachment name (Db2 Installation and Migration)

Related reference

DSNTIPM: MVS PARMLIB updates panel (Db2 Installation and Migration)

DSN3114I ***csect-name*** **GROUP ATTACH NAME IS NOT ALLOWED WITH THIS RELEASE OF MVS.** ***ssnm*** **IS NOT AVAILABLE**

Explanation

Db2 found an installation-specified group attachment name specified in the subsystem definition parameter, IEFSSN*xx*, but Db2 group attachment is not supported with this release of MVS. The Db2 group attachment feature requires MVS/ESA SP4.2.2 or a later release. The Db2 subsystem *ssnm* is not available.

System programmer response

Delete the group attachment name in the subsystem definition parameter and re-IPL.

DSN3115I ***csect-name*** **UNABLE TO REGISTER GROUP ATTACH NAME, NAME/TOKEN RC =** ***xx*****.** ***ssnm*** **IS NOT AVAILABLE**

Explanation

Db2 is unable to register the installation-specified group attach name with MVS. The group attach name is specified in the subsystem definition parameter. *xx* is the hexadecimal return code from the MVS Name/Token service. Subsystem *ssnm* is not available.

System action

This Db2 subsystem is not available.

System programmer response

Refer to MVS documentation about the Name/Token macro service to determine the reason for the *xx* return codes.

DSN3116I ***csect-name*** **THE VERSION OF THE DB2 EARLY CODE IS INCOMPATIBLE WITH THIS VERSION OF MVS.** ***ssnm*** **IS NOT AVAILABLE**

Explanation

This version of Db2 early code requires a newer release of z/OS than the level that is active on this system. The specified subsystem is not available.

csect-name
The name of the control section that issued the message.

ssnm
The subsystem name.

System programmer response

The version of the Db2 early code that was loaded from the LINKLIST library is not compatible with the release of z/OS that you are using. Change the concatenation order of the LINKLIST library so that a compatible release of Db2 early code is used.

DSN3117I ***xxxx*** **MAINTENANCE LEVELS**

Explanation

The -REFRESH Db2, EARLY command completed successfully.

DSN3118I ***csect-name*** **DSN3UR00 - GROUP ATTACH NAME** ***group-name*** **WAS ALREADY DEFINED AS A SUBGROUP ATTACH**

Explanation

The IEFSSN*xx* subsystem parameter specifies a group name that has already been used as a subgroup name.

csect-name
The name of the control section that issued the message.

group-name
The group attachment name.

System action

The Db2 subsystem is not available.

System programmer response

Change the subgroup name in the subsystem parameter, and re-IPL z/OS.

Related concepts

Group attachments and subgroup attachments (Db2 Data Sharing Planning and Administration)

Related reference

DSNTIPM: MVS PARMLIB updates panel (Db2 Installation and Migration)

DSN3119I ***csect-name*** **DSN3UR00 - SUBGROUP ATTACH** ***subgroup-name*** **DOES NOT BELONG TO GROUP ATTACH** ***group-name***

Explanation

The IEFSSN*xx* subsystem parameter specifies a subgroup attachment name that does not belong to the specified group.

csect-name
The name of the control section that issued the message.

subgroup-name
The subgroup attachment name.

group-name
The group attachment name.

A subgroup attachment name can belong to only one group.

System action

The Db2 subsystem is not available.

System programmer response

Change the subgroup name in the subsystem parameter, and re-IPL z/OS.

Related concepts

Group attachments and subgroup attachments (Db2 Data Sharing Planning and Administration)

Related reference

DSNTIPM: MVS PARMLIB updates panel (Db2 Installation and Migration)

DSN3120I ***csect-name*** **DSN3UR00 -** ***group-name*** **CANNOT BE DEFINED AS BOTH THE GROUP ATTACH NAME AND THE SUBGROUP ATTACH NAME**

Explanation

The same name was specified for the group and subgroup attachment names. In compliance with subgroup attachment rules, these names must be unique.

csect-name
The name of the control section that issued the message.

group-name
The group attachment name.

System action

The Db2 subsystem is not available.

System programmer response

Change either the group or the subgroup name, and re-IPL z/OS.

Related concepts

Group attachments and subgroup attachments (Db2 Data Sharing Planning and Administration)

Related reference

DSNTIPK: Define group or member panel (Db2 Installation and Migration)

DSN3121I ***csect-name*** **DSN3UR00 - SUBGROUP ATTACH** ***subgroup-name*** **WAS ALREADY DEFINED AS A GROUP ATTACH**

Explanation

The IEFSSN*xx* subsystem parameter specifies a subgroup name that has already been used as a group name.

csect-name
The name of the control section that issued the message.

subgroup-name
The subgroup attachment name.

System action

The Db2 subsystem is not available.

System programmer response

Change either the group name or the subgroup name, and re-IPL z/OS.

Related concepts

Group attachments and subgroup attachments (Db2 Data Sharing Planning and Administration)

Related reference

DSNTIPM: MVS PARMLIB updates panel (Db2 Installation and Migration)

DSN3201I **ABNORMAL EOT IN PROGRESS FOR USER=*xxxxxxxx* CONNECTION-ID=*yyyyyyyy* CORRELATION-ID=*zzzzzzzzzzzz* JOBNAME=*aaaaaaaa* ASID=*9999* TCB=*99999999***

Explanation

Abnormal termination started for the agent with the values shown for USER, CONNECTION-ID, CORRELATION-ID, JOBNAME, ASID and TCB address. These values are the last known set of identifiers for the terminating agent.

The abnormal termination could be the result of a failure in the allied agent's address space or the result of an operator cancel command.

The value for the USER and/or CORRELATION-ID might be blank. If the terminating agent is connected to Db2 at the IDENTIFY level and was not previously signed on, or was not previously authorized to a plan at the time of the failure, then no CORRELATION-ID is associated with the agent. Otherwise, the values for the USER, CONNECTION-ID, CORRELATION-ID, JOBNAME and ASID are the last values established to Db2 for this connection. They might represent the current activity of the agent. The TCB value is the address of the TCB that is terminating. Previous Db2 work by this agent might have completed successfully. Correlation IDs beginning with '0nn', where nn is a number from 01 to 28, identify system agents.

System action

The agent was previously queued to a System Services service task for termination processing. This message indicates that the agent was taken from the queue for processing. Any uncommitted database changes are rolled back.

System programmer response

See the Problem Determination section for this message. The MVS CANCEL and FORCE commands have no effect and should not be issued. Db2 should not be canceled. If an extensive rollback is in progress, the subsequent Db2 restart might take a very long time because of additional log activity.

User response

Your job or TSO session cannot be canceled. The PA1 key has no effect in this circumstance. To avoid long

waits when your application program is canceled or terminates abnormally, issue frequent commits.

Problem determination

You can detect a deferred termination condition for a task by examining several indicators. Some or all of the following might be present:

- The allied address space might be swapped out and appear to be in a never-ending WAIT condition.
- The MVS commands CANCEL and FORCE appear to have no effect.
- The allied task holds an MVS-shared ENQ on resource SYSZDSN3.ERLYOLRHerly-block-address.
- During abnormal termination of the agent associated with the failing task, but before this message was written, the task's connection appears on the -DISPLAY THREAD output with a QD status. See message DSNV401I for the definition of this status code.
- This message, DSN3201I, is written to the MVS console after the agent is removed from the service task work queue when termination processing begins.
- During abnormal termination of the agent associated with the failing task, the task's connection appears on the -DISPLAY THREAD output with a D status. See message DSNV401I for the definition of this status code.

DSN3458I ***csect-name*** **MODULE** ***modname*** **MUST HAVE THE AMODE (31) ATTRIBUTE**

Explanation

An authorization exit load module was not link-edited with the 31-bit addressing mode (AMODE) attribute. Either load module DSN3@ATH or DSN3@SGN is specified by 'modname'.

System action

Subsystem startup is terminated.

System programmer response

Relink-edit the authorization exit module specifying the attributes AMODE(31), RMODE(ANY).

Problem determination

Check the load module attributes used for the link-edit.

DSN3580I CONNECTION FOR [EOM | FEOT | IDEN] GAVE RC=X xxxxxxxx, REASON=X xxxxxxxx

Explanation

A nonzero return code has been returned to DSN3AMI2 from the SSSS connect to subsystem interface call. The variables in the message indicate which SSI call is involved and the actual return and reason codes associated with it.

System action

The current task (TCB) is abended with a system completion code of X'04E' and with an abend reason code of '00F30580' The Db2 subsystem terminates.

Operator response

Notify the system programmer.

System programmer response

Restart the Db2 subsystem.

Problem determination

The trace table and stack storage associated with the EB in register 6 must be examined to locate the error.

Collect the following diagnostic items:

- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

DSN3581I ***csect-name*** **SAF** ***service*** **FAILED WITH SAF RETURN CODE =** ***saf-retc*****, RACF RETURN CODE =** ***racf-retc*****, AND RACF REASON CODE =** ***racf-reac*****. DB2 REASON CODE =** ***db2-reac***

Explanation

Db2 invoked the specified SAF (Security Authorization Facility) service which failed with the following codes:

csect
The CSECT name of the Db2 module that issued the message.

service
The name of the service that failed.

saf-retc
The SAF return code.

racf-retc
The RACF return code.

db2-retc
The Db2-assigned reason code for the failure.

Db2 associates the failure with a Db2 reason code which may appear in other messages associated with this failure.

System action

The call fails. Other messages associated with this feature may follow.

Operator response

Notify the system programmer.

System programmer response

The action to take depends on the service being used.

- R_ticketserv

  Db2 requests this service to parse a Kerberos ticket received from a remote client. Refer to *z/OS Security Server (RACF) Callable services* for an explanation of the error.

  Db2 uses the SAF R_ticketserv service to parse a Kerberos ticket that was received from a remote client. Refer to *z/OS Security Server (RACF) Callable services* for an explanation of the error. A SAF and RACF return code of 8 and 16 indicate a failure from the Network Authentication Privacy Service (Kerberos) when parsing the ticket in which case the RACF reason code contains a status code from the Network Authentication Privacy Service. These status codes are documented in the *z/OS SecureWaySecurity Server Network Authentication and Privacy Service Administration* manual. Additional information for some of the more common status codes and how they relate to Db2 follows:

  96C73A07
  One possibility is that you must associate the *ssnm*DIST started task user ID with a principal name and the client system must use this principal name in the Kerberos target principal.

  Note: Db2 Connect client systems must catalog a Db2 for z/OS database with "AUTHENTICATION KERBEROS TARGET PRINCIPAL principal_name". Assume that SYSDSP is the user ID associated with the ssnmDIST started task. A principal, say SYSDSPp, must be associated to the SYSDSP user ID by a RACF ALTUSER command. Further, the SYSDSPp principal name must appear in the target principal name of the Db2 Connect database configuration for the Db2 for z/OS database.

- R_ticketserv(principal name)

  Db2 uses the SAF R_usermap service to determine the user ID associated with a Kerberos ticket received from a remote client. Refer to *z/OS Security Server (RACF) Callable services* for an explanation of the error. The principal name obtained from the ticket is included in parenthesis to assist the user in determining the cause of the problem. Either the client system is using an invalid principal name, or a principal name to user ID association has not been defined to RACF.

  Principals authenticated on the local z/OS realm must have a mapping that associates the local principal name to a local RACF user ID. This association can be made by using the RACF ADDUSER or ALTUSER commands with the KERBNAME parameter.

  Principals authenticated on a foreign realm must have a mapping that associates the foreign fully qualified principal name to a local RACF user ID. This association can be made by using the RACF RDEFINE or RALTER commands with the KERBLINK parameter.

- R_usermap

  Db2 requests this service to determine the user ID associated with a Kerberos ticket received from a remote client. Refer to *z/OS Security Server (RACF) Callable services* for an explanation of the error.

User response

Notify the system programmer.

Chapter 24. DSN5 messages

Message identifiers that begin with DSN5 communicate information about Db2.

DSN5001I **ERROR OCCURRED WHILE CONTACTING OMNIFIND SERVER *server* FOR *function*. ON COLLECTION *collection*.**

Explanation

A failure that requires action from the system administrator occurred while contacting an OmniFind server.

System action

If the function is SYSPROC.SYSTS_DROP, the information in Db2 for the collection is deleted. If the function is SYSPROC.SYSTS_UPDATE, takeover of the collection by another IBM OmniFind server of SYSIBMTS.SYSTEXTSERVERS is attempted.

Programmer response:
If the function is SYSPROC.SYSTS_DROP, then *collection* must be deleted at the OF server using OF administration APIs. If the function is SEARCH (Contains or Score), check if the IBM OmniFind server has a persistent problem and call SYSPROC.SYSTS_TAKEOVER. If the function is SYSPROC.SYSTS_TAKEOVER, then takeover was not possible or failed; therefore check the IBM OmniFind server. If takeover was not possible because no additional servers are registered in SYSIBMTS. SYSTEXTSERVERS (message parameter *server* empty), add an additional server and check and correct the problem on the existing server or servers.

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Chapter 25. DSN7 messages

Message identifiers that begin with DSN7 communicate information about the group manager.

DSN7000I ***csect-name*** **REQUIRED CSECT DSN6GRP COULD NOT BE FOUND IN SYSTEM PARAMETERS LOAD MODULE.**

Explanation

The required CSECT DSN6GRP was not found in the system parameters load module.

System action

The Db2 subsystem terminates with reason code 00F70001.

Operator response

Restart Db2 with the correct system parameters load module.

System programmer response

Reassemble the system parameters load module and include the DSN6GRP macro.

DSN7003I ***csect-name*** **SCA DELETED BECAUSE OF SUBSYSTEM PARAMETER SETTING**

Explanation

The Db2 shared communications area (SCA) has been deleted because the DEL_CFSTRUCT_ON_RESTART subsystem parameter indicated that Db2 restart should attempt to delete it.

csect-name
The name of the control section that issued the message.

System action

The SCA is deleted and rebuilt.

User response

No action is required.

Related reference
DEL CF STRUCTS field (DEL_CFSTRUCTS_ON_RESTART subsystem parameter) (Db2 Installation and Migration)

DSN7100I ***src csect-name display-group-output***

Explanation

This message displays output from the DISPLAY GROUP command.

src
The command prefix for the DISPLAY GROUP command.

csect-name
The name of the control section that issued the message.

display-group-output
The DISPLAY GROUP command output formatted on multiple subsequent lines, as described in the following sections:

- Output heading
- Data-sharing members
- New-function mode enablement
- Subgroup attachment
- Shared communications area
- LOCK1 structure
- SPT01 table space information
- End of output

Output heading

The name of the control section is followed by heading information for the output:

GROUP (*text*)
The name of the data-sharing group.

CATALOG LEVEL (*text*)
A 3-character numeric string that indicates the highest release with which any Db2 subsystem in the group is started.

MODE (*text*)
A 2- or 3-character indicator of the current mode of the system:

C*n*
Conversion mode. All members in the group are on the same Db2 release.

C*n**
Conversion mode. The * indicates that at one time the data-sharing group was in enabling-new-function mode, enabling-new-function mode*, or new-function mode.

E*n*
Enabling-new-function mode.

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E*n**
Enabling-new-function mode. The * indicates that at one time the data-sharing group was in new-function mode.

N
New-function mode.

X
Coexistence mode. Members in the data-sharing group are on different Db2 releases, or a member has performed a fallback from a higher release.

PROTOCOL LEVEL (*num*)
A single numeric character that indicates the current locking protocol that is used in the data-sharing group.

GROUP ATTACH NAME (*text*)
The group attach name for the data-sharing group.

Data-sharing members

The output heading is followed by a section that contains information about the data-sharing members:

DB2 MEMBER *text*
The name of the Db2 data-sharing member.

ID *num*
The internally assigned ID for each data-sharing member.

SUBSYS *text*
The subsystem name of the data-sharing member.

CMDPREF *text*
The command prefix of the data-sharing member.

STATUS *text*
The state of the data-sharing member. Expected values are:

ACTIVE
The member is up and running.

AI
The member is active with more conditions. Indoubt or postponed abort units of recovery are unresolved, so retained locks are held.

DEACT
The member is deactivated.

FAILED
The member terminated abnormally.

QUIESCED
The member is down normally.

QI
The member is down with indoubt units of recovery.

QR
The member is down with resynchronization responsibility.

QC
The member is down with group buffer pool castout responsibility.

QCR, QIC, QIR, or QICR
Possible combinations of the quiesced states (QI, QR, and QC):

- QCR is the equivalent of QC and QR.
- QIC is the equivalent of QI and QC.
- QIR is the equivalent of QI and QR.
- QICR is the equivalent of QC, QI, and QR.

DB2 LVL *num*
A 3-character numeral string that identifies the version, release, and modification level of the group member.

SYSTEM NAME *text*
The name of the z/OS system on which the data-sharing member runs.

IRLM SUBSYS *text*
The accompanied IRLM's subsystem name for this Db2 member.

IRLMPROC *text*
The accompanied IRLM's startup procedure name.

New-function mode enablement

If the DISPLAY GROUP command is issued with the DETAIL option, and the Db2 catalog is in enabling-new-function mode (indicated by either E*n* or E*n** in the output heading), the following additional information is provided:

TABLE SPACE *text*
The name of the table space.

NEW FUNCTION *text*
An indicator of the readiness of the table space for new-function mode. Expected values are:

YES
The table space was created in Unicode or it has been converted to Unicode.

NO
The table space is not enabled for new-function mode. Table spaces are converted to Unicode during enabling-new-function mode.

Subgroup attachment

If the DISPLAY GROUP command is issued with the DETAIL option, subgroup attachment information is provided:

GROUP ATTACH *text*
The name of the group attachment group for the data-sharing member that is printing the output.

MEMBERS OF SUBGROUP ATTACH *text*
The name of the subgroup attachment group, followed by one or more lines that list the members of the subgroup. Each line contains up to eight members.

If more than 105 subgroup attachment groups are found, the following message is displayed:

```
MAXIMUM NUMBER OF SUBGROUP ATTACH GROUPS
DISPLAYED
```

In this case, no additional groups are reported.

Shared communications area

The output provides the following information about the shared communications area (SCA):

STRUCTURE SIZE *num*
The size of the shared communications area (SCA), measured in kilobytes (KB).

STATUS *tx*
A 2-character indicator of the status of the shared communications area. Possible values are:

AC
The SCA is active.

CC
The SCA rebuild connect function completed.

CS
The SCA rebuild connect function started.

DS
The SCA loss of connectivity, delayed action started.

DC
The SCA loss of connectivity, delayed action completed.

EC
The SCA rebuild stop complete function completed.

ES
The SCA rebuild stop complete function started.

IN
The SCA is in initialization phase.

LC
The SCA rebuild cleanup function completed.

LS
The SCA rebuild cleanup function started.

OC
The SCA rebuild connect complete function completed.

OS
The SCA rebuild connect complete function started.

PC
The SCA rebuild process complete function completed.

PS
The SCA rebuild process complete function started.

QC
The SCA rebuild quiesce function completed.

QS
The SCA rebuild quiesce function started.

RC
The SCA rebuild resource manager invocation completed.

RS
The SCA rebuild resource manager invocation started.

SC
The SCA rebuild stop function completed.

SS
The SCA rebuild stop function started.

TE
The SCA is in termination phase.

UC
The SCA rebuild resource manager invocation completed.

US
The SCA rebuild resource manager invocation started.

VC
The SCA volatility change function completed.

VS
The SCA volatility change function started.

SCA IN USE *num*
Either the percentage of the number of entries that are in use in the SCA or the percentage of the number of elements that are in use in the SCA, whichever is larger. If the SCA structure is very large or if only a small number of SCA entries are in use, the percentage that is in use might be less than 1%. In this case, the percentage is indicated as:

```
SCA IN USE: < num %
```

LOCK1 structure

The output provides the following information about the LOCK1 structure:

STRUCTURE SIZE *num*
The size of the LOCK1 coupling facility structure, measured in kilobytes (KB).

LOCK ENTRIES *num*
The maximum number of lock table entries in the LOCK1 coupling facility structure.

LIST ENTRIES *num*
The maximum number of modify lock list entries in the LOCK1 coupling facility structure.

LIST ENTRIES IN USE *num*
The number of modify lock list entries in the LOCK1 coupling facility structure that are currently in use. These entries are sometimes referred to as *record data*.

SPT01 table space information

The output contains information about the inline length of BLOB column SPTSEC_DATA in the SPT01 table space.

If the SPT01 table space is available, the following output is displayed:

SPT01 INLINE LENGTH *num*
The current inline length of the SPTSEC_DATA column.

If the SPT01 table space is unavailable when DISPLAY GROUP is issued on a subsystem or data sharing member that is in conversion mode, the following output is displayed:

If the SPT01 table space is unavailable when DISPLAY GROUP is issued on a subsystem or data sharing member that is in enabling-new-function mode, the following messages are displayed:

REASON *reason-code*
The Db2 reason code value that indicates the reason for the failure. For explanations of reason codes, see Db2 reason codes (Db2 Codes).

TYPE *resource-type*
The type of resource. For an explanation of *resource-type* and *resource-name* values, see Appendix C, “Resource types,” on page 1171.

NAME *resource-name*
The resource name. For an explanation of *resource-type* and *resource-name* values, see Appendix C, “Resource types,” on page 1171.

End of output

The output normally ends with the following message:

```
*** END DISPLAY OF GROUP(text)
```

GROUP
The name of the group that the preceding lines of the output refer to.

If the output exceeds the maximum length, the following message marks the end of the output instead:

```
DISPLAY TERMINATED DUE TO INSUFFICIENT MESSAGE
   SPACE.
```

System action

Processing continues.

User response

No action is required.

Related reference
-DISPLAY GROUP (Db2) (Db2 Commands)
Obtaining information about the group (Db2 Data Sharing Planning and Administration)
Related information
00C9000A (Db2 Codes)

DSN7114I **XCF OR STRUCTURE INFORMATION NOT AVAILABLE. MVS *nnnnnnnn* RETURN CODE=*xxxxxxxx*, MVS *nnnnnnnn* REASON CODE=*yyyyyyyy*.**

Explanation

An error occurred during the query of the cross-system coupling facility (XCF) or CF structure information.

nnnnnnnn could be IXCQUERY or IXLMG.

System action

The Db2 subsystem displays the group, but some XCF or coupling facility structure information is missing. Refer to *MVS/ESA Programming: Sysplex Services Reference* for an explanation of IXCQUERY or IXLMG return and reason codes.

DSN7401I ***csect-name* INCONSISTENT DATA SHARING PARAMETER DETECTED, *parameter-name* IN DB2 SYSTEM PARAMETERS (*sysparm-parm*) IS NOT EQUAL TO PARAMETER IN THE DB2 START-UP PROCEDURE (*start-parm*).**

Explanation

At least one data sharing parameter in the member's system parameters is not equal to the data sharing parameter value passed on the Db2 start-up procedure.

System action

The Db2 subsystem terminates with reason code 00F70003.

Operator response

Restart Db2 with the correct system parameters load module or inform the system programmer to change the Db2 start-up procedure.

System programmer response

Reassemble the system parameters load module. Make sure that the group name and the member name match the values in the Db2 start-up procedure, or correct the parameters on the Db2 start-up procedure.

DSN7403I ***csect-name*** **MEMBER(*member-name*) IS ALREADY ACTIVE ON SYSTEM(*mvs-system-name*).**

Explanation

The started Db2 subsystem is already active on another MVS system.

System action

The Db2 subsystem terminates with reason code 00F70003.

Operator response

If you want the Db2 subsystem to run on this MVS system, stop the Db2 subsystem on the other MVS. After the Db2 subsystem stops, restart the Db2 on this MVS.

DSN7404I ***csect-name*** **INVALID MEMBER(*member-name*) WAS FOUND IN DB2 XCF GROUP(*db2-group-name*). MEMBER HAS BEEN DELETED.**

Explanation

The invalid member was found in a Db2 data sharing group, which is a particular type of cross-system coupling facility (XCF) group. The invalid name *member-name* was found in data sharing group *db2-group-name* and was deleted. *member-name* might represent an unauthorized program, other than Db2 for z/OS, that attempted to join the data sharing group.

System action

The Db2 subsystem continues.

This message is non-scrollable. It remains highlighted on the console until you take the appropriate action.

Operator response

Report the occurrence of this message to your system programmer.

System programmer response

Investigate which unauthorized program joined the Db2 group and find its owner. This could indicate a security violation.

DSN7405I ***csect-name*** **MEMBER(*member-name*) UNABLE TO JOIN DATA SHARING GROUP(*group-name*), MVS IXCJOIN RETURN CODE=*xxxxxxxx*, MVS IXCJOIN REASON CODE=*yyyyyyyy*.**

Explanation

An unexpected error occurred when the data sharing Db2 member attempted to join the MVS cross-system coupling facility (XCF) data sharing group.

System action

The Db2 subsystem terminates with reason code 00F70408.

Operator response

Issue an MVS 'DISPLAY XCF,GROUP' command to ensure that XCF is functional; then try to restart the Db2 subsystem.

System programmer response

Refer to *MVS/ESA Programming: Sysplex Services Reference* for an explanation of the IXCJOIN return and reason codes.

DSN7406I ***csect-name*** **UNABLE TO QUERY DATA SHARING GROUP INFORMATION, MVS IXCQUERY RETURN CODE=*xxxxxxxx*, MVS IXCQUERY REASON CODE=*yyyyyyyy*.**

Explanation

An unexpected error occurred during the execution of the MVS IXCQUERY macro.

System action

The Db2 subsystem terminates with reason code 00F70406.

Operator response

Issue an MVS DISPLAY XCF,GROUP command to ensure that XCF is functional. Then try to restart the Db2 subsystem again.

System programmer response

Refer to *MVS/ESA Programming: Sysplex Services Reference* for an explanation of the IXCQUERY return and reason codes.

DSN7407I ***csect-name*** **AUTOMATIC RESTART MANAGER** ***function*** **FAILED. MVS IXCARM RETURN CODE =** ***xxxxxxxx*****, MVS IXCARM REASON CODE =** ***yyyyyyyy*****.**

Explanation

Db2 encountered an error using the specified MVS automatic restart manager (ARM) function.

System action

Db2 continues. However, if Db2 abnormally terminates, the MVS ARM cannot automatically restart Db2.

System programmer response

Refer to *MVS/ESA Programming: Sysplex Services Reference* for the function, return code, and reason code from the IXCARM request.

DSN7408I ***csect-name*** **ARM EVENT EXIT FAILED. DB2 SUBSYSTEM** ***ssnm*** **NOT RESTARTED. MVS IEFSSI RETURN CODE =** ***xxxxxxxx*****, MVS IEFSSI REASON CODE =** ***yyyyyyyy*****.**

Explanation

The Db2 ARM event exit encountered an error while attempting to define the Db2 subsystem to MVS.

System action

The automatic restart of the Db2 subsystem is stopped.

System programmer response

Refer to *MVS/ESA Programming: Assembler Services Reference* for return and reason codes from the IEFSSI request. If the IEFSSI return code and reason code are 0, look in the console log for previous messages that indicate why the definition of the Db2 subsystem failed. You can manually start Db2 by using the -START DB2 command on any system where the Db2 subsystem is defined.

DSN7409I ***csect-name*** **MEMBER(*member-name*) UNABLE TO QUIESCE FROM DATA SHARING GROUP(*group-name*), MVS IXCQUIES RETURN CODE=*xxxxxxxx*, MVS IXCQUIES REASON CODE=*yyyyyyyy*.**

Explanation

An unexpected error occurred when the data sharing Db2 member attempted to place itself in an MVS cross-system coupling facility (XCF) quiesced state.

System action

The Db2 subsystem termination continues.

Operator response

Inform your system programmer.

System programmer response

Refer to *MVS/ESA Programming: Sysplex Services Reference* for an explanation of the IXCQUIES return and reason codes.

DSN7410I ***csect-name*** **MEMBER** ***member-name*** **IS ATTEMPTING TO START DB2 IN A DATA SHARING GROUP WITH AN INCOMPATIBLE SCA FORMAT.**

Explanation

A Db2 member is attempting to start at a code level that is not compatible with the current catalog level of the data sharing group. The formats of the SCA (shared communications area) for these two levels are not compatible.

csect-name
The name of the control section that issued the message.

member-name
The name of the Db2 member.

This message can occur when the starting Db2 member is at a release level for which coexistence with the data sharing group is not supported.

System action

Db2 terminates with reason code 00F70403.

Operator response

Verify the following items:

- Coexistence is supported between the two Db2 releases that you are trying to run.

- The Db2 startup procedure references the correct set of load libraries.

Problem determination

Collect the following diagnostic items:

- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time that spans the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by Db2 (04E and 04F abends).
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the Db2 print log map (DSNJU004) utility.

Related concepts

Release coexistence in Db2 data sharing (Db2 Installation and Migration)

Related tasks

Determining the release of a data sharing group in coexistence (Db2 Installation and Migration)

Collecting diagnostic data (Collecting data)

Related information

00F70403 (Db2 Codes)

DSN7501A ***csect-name* SCA STRUCTURE *sca-structure-name* CONNECTIVITY FAILURE.**

Explanation

The specified Db2 member lost connectivity to the shared communication area (SCA) structure.

System action

The specified Db2 disconnects from the SCA and terminates with reason code 00F70600.

Operator response

Notify the system programmer.

System programmer response

Find out why the link from this central processor complex (CPC) to the SCA structure was lost. After fixing it, restart Db2.

DSN7502I ***csect-name* SCA STRUCTURE *sca-structure-name* FAILURE, ATTEMPT TO REBUILD IS IN PROGRESS.**

Explanation

The specified Db2 member detected the shared communications area (SCA) structure failure.

csect-name
The name of the control section that issued the message.

sca-structure-name
The name of the SCA structure.

System action

Db2 tries to rebuild the SCA structure on a coupling facility in the preference list for the coupling facility.

Operator response

Wait for message DSN7503I or DSN7504I.

Related information

DSN7503I
csect-name SCA STRUCTURE *sca-structure-name* REBUILD SUCCESSFUL.

DSN7504I
csect-name SCA STRUCTURE *sca-structure-name* REBUILD UNSUCCESSFUL. REASON CODE = *xx*.

How Db2 recovers from coupling facility failures (Db2 Data Sharing Planning and Administration)

DSN7503I ***csect-name* SCA STRUCTURE *sca-structure-name* REBUILD SUCCESSFUL.**

Explanation

This member successfully connected to a shared communications area (SCA) structure on the same or an alternate coupling facility and completed restoration of its information in the shared communications area (SCA).

System action

Db2 processing continues.

DSN7504I ***csect-name* SCA STRUCTURE *sca-structure-name* REBUILD UNSUCCESSFUL. REASON CODE = *xx*.**

Explanation

This member has not successfully connected to a shared communication area (SCA) structure on an alternate coupling facility and completed restoration of its information in the shared communications area (SCA). This message follows message DSN7502I.

04
An operator requested to stop the rebuild process.

08
A Db2 resource manager requested to stop the rebuild process.

12
The new SCA structure failed during the rebuild process.

16
A Db2 member lost connectivity to the new SCA in the rebuild process.

20
An MVS service used during the rebuild process failed. A message was issued from the failed MVS service.

System action

This Db2 member terminates with reason code 00F70601. Other members can continue processing.

System programmer response

See the termination code for more details.

DSN7505A ***csect-name*** **THERE IS A SHORTAGE OF FREE STORAGE IN SCA STRUCTURE** ***sca-structure-name***

Explanation

The amount of free storage in the shared communications area (SCA) coupling facility structure is low. The SCA is 75 percent full. Because SCA storage space is required by some Db2 commands and processes, the availability of those processes might be affected. Completely running out of SCA storage can cause Db2 subsystem outages.

System action

Db2 processing continues.

This message is non-scrollable. It remains highlighted on the console until you take the appropriate action.

This message might not be automatically deleted in a pre SP5.2.1-JES3 environment.

Operator response

If the message remains highlighted after the error situation is cleared up, manually delete the message from the console.

System programmer response

You can monitor the amount of SCA storage in use with the DISPLAY GROUP command.

You can free SCA storage by removing exception conditions. Another thing you can do is issue START DATABASE commands with the SPACENAM option or use the RECOVER utility to remove pages from the logical page list (LPL).

If you don't do anything to reclaim space, message DSN7512A appears when the SCA is 90 percent full.

DSN7506A ***csect-name*** **CONNECT TO THE SCA STRUCTURE** ***sca-structure-name*** **FAILED. MVS IXLCONN RETURN CODE=*xxxxxxxx*, MVS IXLCONN REASON CODE=*yyyyyyyy*.**

Explanation

Db2 cannot connect to the shared communications area (SCA) coupling facility structure.

System action

Db2 startup terminates with reason code 00F70602.

System programmer response

Db2 uses the MVS IXLCONN service to connect to the SCA structure. Refer to *MVS/ESA Programming: Sysplex Services Reference* for return and reason codes from the IXLCONN request.

DSN7507I ***csect-name*** **SCA STRUCTURE** ***sca-structure-name*** **IS ALLOCATED IN A VOLATILE STRUCTURE.**

Explanation

The shared communications area (SCA) structure is volatile.

System action

Db2 processing continues.

System programmer response

One Db2 issues this message whenever the structure has the volatile attribute. Db2 detects this either on the first connection to the SCA or on the attribute changes later. Db2 always requests a nonvolatile SCA. If this is not what you want, change the MVS CFRM administrative policy and request a rebuild of the SCA with the MVS SETXCF START,REBUILD command.

DSN7508I ***csect-name*** **ACCESS TO THE SCA STRUCTURE** ***sca-structure-name*** **FAILED. MVS IXLLIST RETURN CODE = *xxxxxxxx*, MVS IXLLIST REASON CODE = *yyyyyyyy*.**

Explanation

Db2 encountered an error in accessing the shared communications area (SCA) structure.

System action

Db2 terminates with reason code 00F70603.

System programmer response

Db2 uses the MVS IXLLIST service to access the SCA structure. Refer to *MVS/ESA Programming: Sysplex Services Reference* for return and reason codes from the IXLLIST request.

DSN7509I ***csect-name*** **SCA STRUCTURE** ***sca-structure-name*** **IS ALLOCATED IN A NONVOLATILE STRUCTURE.**

Explanation

The SCA structure is now contained in a nonvolatile coupling facility structure.

System action

Db2 processing continues.

DSN7510I ***csect-name*** **SCA STRUCTURE** ***sca-structure-name*** **REBUILD REQUEST RECEIVED, BUT SUBSYSTEM IS NOT READY TO PARTICIPATE.**

Explanation

The Db2 subsystem received a request from MVS to rebuild the shared communications area (SCA), but Db2 is not ready to participate in this process because Db2 startup has not yet completed.

System action

Db2 terminates with reason code 00F70604. The SCA rebuild process might continue for other DB2s in the data sharing group.

Operator response

Wait until the SCA rebuild process is finished and then start the failed Db2 again.

DSN7511I ***csect-name*** **RESPONSE TO MVS REBUILD COMPLETE OF SCA STRUCTURE** ***sca-structure-name*** **FAILED. MVS IXLREBLD RETURN CODE =** ***xxxxxxxx*****, MVS IXLREBLD REASON CODE =** ***yyyyyyyy*****.**

Explanation

Db2 encountered an error during the rebuild of the shared communications area (SCA) structure.

System action

Db2 stops.

System programmer response

Db2 uses the MVS IXLREBLD service during the SCA structure rebuild. Refer to *MVS/ESA Programming: Sysplex Services Reference* for return and reason codes from the IXLREBLD request.

DSN7512A ***csect-name*** **THERE IS A CRITICAL SHORTAGE OF FREE STORAGE IN SCA STRUCTURE** ***sca-structure-name***

Explanation

The amount of free storage in the shared communications area (SCA) coupling facility structure is critically low. The SCA is 90 percent full.

System action

Db2 processing continues. However, Db2 limits use of SCA to critical information. Some utilities or commands that cannot be completed can cause one or more members of the group to come down.

This message is non-scrollable. It remains highlighted on the console until you take the appropriate action.

This message might not be automatically deleted in a pre SP5.2.1-JES3 environment.

System programmer response

You can monitor the amount of SCA storage in use with the DISPLAY GROUP command.

You can free SCA storage by removing exception conditions. Another thing you can do is issue START DATABASE commands with the SPACENAM option or use the RECOVER utility to remove pages from the logical page list (LPL). Then restart any failed DB2s.

If your actions do not free up enough space, or if the problem continues to occur, you have the following options, depending on what level of MVS and the coupling facility control code you are running with:

- If all members of the group are running with MVS Version 5 Release 2 and with a coupling facility control code level greater than 0, issue the SETXCF START,ALTER command to increase the size of the SCA. The size you specify must be less than or equal

to the maximum size defined the CFRM policy for the SCA structure.

If the maximum size (SIZE in the CFRM policy) is still not big enough, take the actions described below for MVS Version 5 Release 1 systems.

- If any or all members of the group are running with MVS Version 5 Release 1 or with a coupling facility control code level of 0, increase the storage for the SCA in the CFRM policy. Then issue the MVS SETXCF START,REBUILD command to rebuild the structure.

Related concepts

Problem: storage shortage in the SCA (Db2 Data Sharing Planning and Administration)

Related reference

-DISPLAY GROUP (Db2) (Db2 Commands)

-START DATABASE (Db2) (Db2 Commands)

DSN7513I ***csect-name*** **SCA STRUCTURE** ***sca-structure-name*** **HAS ADEQUATE FREE STORAGE.**

Explanation

The shared communications area (SCA) coupling facility structure has adequate free storage to function properly.

This message is shown in the following circumstances:

- After the SCA was rebuilt.
- After the SCA usage goes below 67%, after its usage was up to 75% or higher.

System action

Db2 processing continues.

DSN7514I ***csect-name*** **RESPONSE TO AN MVS REBUILD RELATED EVENT FOR THE SCA STRUCTURE** ***sca-structure-name*** **FAILED. MVS IXLEERSP RETURN CODE =** ***xxxxxxxx*****, MVS IXLEERSP REASON CODE =** ***yyyyyyyy*****.**

Explanation

Db2 encountered an error during the rebuild of the shared communications area (SCA) structure.

System action

Db2 terminates.

System programmer response

Db2 uses the MVS IXLEERSP service to respond to SCA structure rebuild. Refer to *MVS/ESA Programming: Sysplex Services Reference* for return and reason codes from the IXLEERSP request.

DSN7515I **DB2 MEMBER(*member-name*) IS WAITING TO JOIN THE XCF GROUP.**

Explanation

Db2 was waiting to join the XCF group, but XCF has not completed cleanup for this member's last instance. Cleanup must be completed before Db2 restart processing can proceed.

member-name
The name of the Db2 member that is attempting to join the XCF group.

System action

Db2 will continue to try to join the XCF group periodically for up to five minutes. If Db2 is unable to join the group within five minutes, message DSN7403I is issued and restart processing terminates.

Operator response

No immediate action is required. Wait for Db2 restart to succeed or fail. If restart processing fails repeatedly, determine the status of XCF during the time that Db2 is waiting to join the XCF group. This information is used in problem determination for message DSN7403I.

Problem determination

While Db2 is waiting for XCF cleanup to complete, issue the following z/OS command, substituting the name of the data sharing group for *group-name*:

```
DISPLAY XCF, GROUP, group-name, ALL
```

Related reference

z/OS displaying cross system coupling facility information (MVS System Commands)

Related information

DSN7403I

csect-name MEMBER(*member-name*) IS ALREADY ACTIVE ON SYSTEM(*mvs-system-name*).

Chapter 26. DSN8 messages

Message identifiers that begin with DSN8 communicate information about sample applications.

DSN8000I **REQUEST IS: *request***

Explanation

The input statement is listed as received.

System action

The request is listed.

User response

See if the input request is what you want.

DSN8001I ***csect* EMPLOYEE NOT FOUND**

Explanation

The 'l' or 'list' request found no employee data that match your request.

System action

No employees are listed.

User response

If no employee data was expected to be found, continue.

Problem determination

If the error is unexpected, list the contents of the employee and department views VEMP and VDEPT to determine why the entry is missing.

DSN8002I ***csect* EMPLOYEE SUCCESSFULLY ADDED**

Explanation

Employee data was added as requested.

System action

The request was executed successfully.

DSN8003I ***csect* EMPLOYEE SUCCESSFULLY ERASED**

Explanation

Data for an employee was erased as requested.

System action

The request was executed successfully.

DSN8004I ***csect* EMPLOYEE SUCCESSFULLY UPDATED**

Explanation

Data for an employee was updated as requested.

System action

The request was executed successfully.

DSN8005E ***csect* EMPLOYEE EXISTS ALREADY, ADD NOT DONE**

Explanation

A request was made to add data for a new employee, but the employee number already exists.

System action

No employee data is added.

User response

Display the existing employee data. If this is the desired employee, update the employee entry. Otherwise, choose a new employee number.

Problem determination

List the contents of the employee view, VEMP, and the department view, VDEPT.

DSN8006E ***csect* EMPLOYEE DOES NOT EXIST, ERASE NOT DONE**

Explanation

The erase requested was not performed. The employee number requested was not present in the table.

System action

No employee data is erased.

User response

Determine if the employee data to be erased should exist. Verify that the correct search criteria and data

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were entered. If appropriate, correct the entries and continue processing.

Problem determination

List the contents of the employee view, VEMP, and the department view, VDEPT.

DSN8007E ***csect*** **EMPLOYEE DOES NOT EXIST, UPDATE NOT DONE**

Explanation

The update requested was not performed. The employee number requested was not present in the table.

System action

No employee data is updated.

User response

Verify that the correct search criteria and data were entered.

Problem determination

List the contents of the employee table (VPHONE, VEMPLP, or EMP) and see if the employee number to be updated is in the table. Correct the update request or the table.

DSN8008I ***csect*** **NO EMPLOYEE FOUND IN TABLE**

Explanation

No employees match the selection criteria.

System action

No employee data is listed.

User response

If no employee data was expected, continue processing.

Problem determination

List the contents of the VPHONE view and the underlying tables.

DSN8011I ***csect*** **DEPARTMENT NOT FOUND**

Explanation

No departments match the selection criteria.

System action

No departments are listed.

User response

If no departments are expected to be found, continue.

Problem determination

If the error is unexpected, list the contents of the department views VDEPT and VDEPMG1 and their underlying tables to determine why the entry is missing.

DSN8012I ***csect*** **DEPARTMENT SUCCESSFULLY ADDED**

Explanation

A department was added as requested.

System action

The request was executed successfully.

DSN8013I ***csect*** **DEPARTMENT SUCCESSFULLY ERASED**

Explanation

Data for a department was erased as requested.

System action

The request was executed successfully.

DSN8014I ***csect*** **DEPARTMENT SUCCESSFULLY UPDATED**

Explanation

Data for a department was updated as requested.

System action

The request was executed successfully.

DSN8015E ***csect*** **DEPARTMENT EXISTS ALREADY, ADD NOT DONE**

Explanation

You requested that a new department be added, but the department exists already.

System action

No departments are added.

User response

Display data for the existing department. If it is what you want, continue. If not, you can update data for this department or choose a new department id.

Problem determination

If the error is unexpected, list the contents of the department views VDEPT and VDEPMG1 and their underlying tables to see if the data differs from what is expected.

DSN8016E ***csect*** **DEPARTMENT DOES NOT EXIST, ERASE NOT DONE**

Explanation

The erase request found no departments which match your request.

System action

No department data is erased.

User response

See if the department data to be erased should exist. Did you enter the correct combination of search criteria and data? If not, correct the entries and continue.

Problem determination

If the error is unexpected, list the contents of the department views VDEPT and VDEPMG1 and their underlying tables to determine why the entry is missing.

DSN8017E ***csect*** **DEPARTMENT DOES NOT EXIST, UPDATE NOT DONE**

Explanation

The update request found no department data which matches your request.

System action

No department data is updated.

User response

See if the department data to be updated should exist. If you did not enter the correct combination of search criteria and data, correct the entries and continue.

Problem determination

If the error is unexpected, list the contents of the department views VDEPT and VDEPMG1 and their underlying tables to determine why the entry is missing.

DSN8018I ***csect*** **CURRENT DEPARTMENT NOT FOUND**

Explanation

A request was made by a 'current' department to reference a 'higher' department. The 'current' department was not found.

System action

No department data is processed.

User response

If the 'current' department was not expected to exist, continue processing.

Problem determination

List the contents of the department views VDEPMG1, VEMP, VASTRDE1, and VASTRDE2 and their underlying tables.

DSN8019E ***csect*** **NO HIGHER DEPARTMENT EXISTS**

Explanation

A request was made by a 'current' department to reference a 'higher' level of the department structure. A 'higher' level does not exist for the requested 'current' department.

System action

No department data is processed.

User response

If a 'higher' department was not expected to be found, continue processing.

Problem determination

List the contents of the department views VDEPMG1, VEMP, VASTRDE1, and VASTRDE2 and their underlying tables.

DSN8021I ***csect*** **ACTIVITY NOT FOUND**

Explanation

No activities match the selection criteria.

System action

No activity is listed.

User response

If no activity was expected to be found, continue processing.

Problem determination

List the contents of the activity views VPROJRE1, VACT, and VPROJACT and their underlying tables.

DSN8022I ***csect*** **ACTIVITY SUCCESSFULLY ADDED**

Explanation

An activity was added as requested.

System action

The request was executed successfully.

DSN8023I ***csect*** **ACTIVITY SUCCESSFULLY ERASED**

Explanation

An activity was erased as requested.

System action

The request was executed successfully.

DSN8024I ***csect*** **ACTIVITY SUCCESSFULLY UPDATED**

Explanation

An activity was updated as requested.

System action

The request was executed successfully.

DSN8025E ***csect*** **ACTIVITY EXISTS ALREADY, ADD NOT DONE**

Explanation

The addition requested was not performed. The activity requested was already present.

System action

No activity is added.

User response

If the activity was expected to already exist, continue processing.

Problem determination

List the contents of the activity views VPROJRE1, VACT, and VPROJACT and their underlying tables.

DSN8026E ***csect*** **ACTIVITY DOES NOT EXIST, ERASE NOT DONE**

Explanation

The erase requested was not performed. The activity requested was not found.

System action

No activity is erased.

User response

If the activity was not expected to be found, continue processing.

Problem determination

List the contents of the activity views VPROJRE1, VACT, and VPROJACT and their underlying tables.

DSN8027E ***csect*** **ACTIVITY DOES NOT EXIST, UPDATE NOT DONE**

Explanation

The update requested was not performed. The activity requested was not found.

System action

No activity is updated.

User response

Determine if the activity to be updated should exist. Verify that the correct search criteria and data were entered. If appropriate, correct the entries and continue processing.

Problem determination

List the contents of the activity views VPROJRE1, VACT, and VPROJACT and their underlying tables.

DSN8028I ***csect*** **ACTIVITY TYPE NOT FOUND, PLEASE ADD IT INTERACTIVELY**

Explanation

The add or update was not performed. The activity type entered was not found.

System action

No activity is listed.

User response

If the activity type was not expected to be found, add it interactively.

Problem determination

List the contents of the activity view, VACT, and its underlying tables.

DSN8031I ***csect*** **PROJECT NOT FOUND**

Explanation

No projects match the selection criteria.

System action

No projects are listed.

User response

If no projects are expected to be listed, continue.

Problem determination

If the error is unexpected, list the contents of the project view VPROJ and its underlying tables to determine why the entry is missing.

DSN8032I ***csect*** **PROJECT SUCCESSFULLY ADDED**

Explanation

A project was added as requested.

System action

The request was executed successfully.

DSN8033I ***csect*** **PROJECT SUCCESSFULLY ERASED**

Explanation

A project was erased as requested.

System action

The request was executed successfully.

DSN8034I ***csect*** **PROJECT SUCCESSFULLY UPDATED**

Explanation

The update was performed as requested.

System action

The request was executed successfully.

DSN8035E ***csect*** **PROJECT EXISTS ALREADY, ADD NOT DONE**

Explanation

You requested that a new project be added, but the project exists already.

System action

The request was not executed successfully.

User response

Display the existing project. If it is what you want, continue. If not, you can update this project or choose a new project id.

Problem determination

If the error was unexpected, list the contents of the project view VPROJ and its underlying tables to see if the data differs from what is expected.

DSN8036E ***csect*** **PROJECT DOES NOT EXIST, ERASE NOT DONE**

Explanation

The erase request found no project which matches your request.

System action

No projects are erased.

User response

See if the project to be erased should exist. Did you enter the correct combination of search criteria and data? If not, correct the entries and continue.

Problem determination

If the error was unexpected, list the contents of the project view VPROJ and its underlying tables to determine why the entry is missing.

DSN8037E ***csect*** **PROJECT DOES NOT EXIST, UPDATE NOT DONE**

Explanation

The update request found no project which matches your request.

System action

No projects are updated.

User response

See if the project to be updated should exist. If you did not enter the correct combination of search criteria and data, correct the entries and continue.

Problem determination

If the error is unexpected, list the contents of the project view VPROJ and its underlying tables to determine why the entry is missing.

DSN8038I ***csect*** **CURRENT PROJECT NOT FOUND**

Explanation

A request was made by a 'current' project to reference a 'higher' project. The 'current' project was not found.

System action

No project data is processed.

User response

If the 'current' project was not expected to be found, continue processing.

Problem determination

List the contents of the project views VPROJRE1, VDEPT, VEMPPROJACT, VEMP, VSTAFAC1, VSTAFAC2, VPSTRDE1, and VPSTRDE2 and their underlying tables.

DSN8039E ***csect*** **NO HIGHER PROJECT EXISTS**

Explanation

A request was made by a 'current' project to reference a 'higher' level of the project structure. A 'higher' level does not exist for the requested 'current' project.

System action

No project data is processed.

User response

If a 'higher' project was not expected to be found, continue processing.

Problem determination

List the contents of the project views VPROJRE1, VDEPT, VEMPPROJACT, VEMP, VSTAFAC1, VSTAFAC2, VPSTRDE1, and VPSTRDE2 and their underlying tables.

DSN8041I ***csect*** **STAFFING NOT FOUND**

Explanation

No project staffing matches the selection criteria.

System action

No project staffing is listed.

User response

If no project staffing was expected to be found, continue processing.

Problem determination

List the contents of the project activity views VPROJRE1, VEMPPROJACT, VACT, and VEMP and their underlying tables.

DSN8042I ***csect*** **STAFFING SUCCESSFULLY ADDED**

Explanation

A project staffing was added as requested.

System action

The request was executed successfully.

DSN8043I ***csect*** **STAFFING SUCCESSFULLY ERASED**

Explanation

A project staffing was erased as requested.

System action

The request was executed successfully.

DSN8044I ***csect*** **STAFFING SUCCESSFULLY UPDATED**

Explanation

A project staffing was updated as requested.

System action

The request was executed successfully.

DSN8045E ***csect*** **STAFFING EXISTS ALREADY, ADD NOT DONE**

Explanation

A request was made to add a project staffing, but the project staffing already exists.

System action

No project staffing is added.

User response

Display the existing project staffing. If this is the desired project staffing, update it. Otherwise, choose a new project staffing.

Problem determination

List the contents of the project activity views VPROJRE1, VEMPPROJACT, VACT, and VEMP and their underlying tables.

DSN8046E ***csect*** **STAFFING DOES NOT EXIST, ERASE NOT DONE**

Explanation

The project staffing was not erased as requested.

System action

No project staffing is erased.

User response

Determine if the project staffing to be erased should exist. Verify that the correct search criteria and data were entered. If appropriate, correct the entries and continue processing.

Problem determination

List the contents of the project activity views VPROJRE1, VEMPPROJACT, VACT, and VEMP and their underlying tables.

DSN8047E ***csect*** **STAFFING DOES NOT EXIST, UPDATE NOT DONE**

Explanation

The update was not performed because the project staffing requested was not found.

System action

No project staffing is updated.

User response

Determine if the project staffing to be updated should exist. Verify that the correct search criteria and data were entered. If appropriate, correct the entries and continue processing.

Problem determination

List the contents of the project activity views VPROJRE1, VEMPPROJACT, VACT, and VEMP and their underlying tables.

DSN8051I ***csect*** **PROGRAM ENDED**

Explanation

The application program finished.

DSN8053I ***csect*** **ROLLBACK SUCCESSFUL, ALL UPDATES REMOVED**

Explanation

After any SQLWARNING or SQLERROR, all updates are removed via a ROLLBACK statement to prevent invalid updates.

System action

The ROLLBACK was executed successfully.

User response

Correct the prior error.

DSN8056I ***csect*** **NO MORE DATA TO DISPLAY**

Explanation

The last page of data has been displayed.

System action

No more data is shown on screen.

User response

If you expect no more data to be displayed, continue.

Problem determination

If more displayed data is expected, list the contents of the view and the underlying tables to see if the data differs from what is expected.

DSN8057I ***csect*** **FURTHER ENTRIES IN TABLE - UPDATE POSSIBLE**

Explanation

More data exists beyond that shown on the screen.

System action

No more data is shown on screen.

User response

Update entries as needed.

DSN8058I ***csect*** **PRESS PA1 FOR NEXT PAGE / ENTER FOR SELECTION MENU**

Explanation

Press the PA1 key to see the data on the next page or press the ENTER key to return to the selection menu.

User response

Press the PA1 key or the ENTER key depending on the function you want to perform.

DSN8060E ***csect-name*** **SQL ERROR, RETURN CODE IS:** ***sql-code***

Explanation

The SQL statement did not execute correctly. The *sql-code* value might be an SQL error or an SQL warning.

System action

The request was not executed successfully.

User response

Determine which SQL statement in the application program caused the error and see if it is reproducible.

Problem determination

Follow the diagnosis approach suggested for the SQL code.

Related concepts

SQL codes (Db2 Codes)

DSN8061E ***csect-name*** **ROLLBACK FAILED, RETURN CODE IS:** ***sql-code***

Explanation

The SQL ROLLBACK statement was not executed correctly.

System action

The request was not executed successfully.

User response

Take the action that is indicated for the SQLCODE that is identified *sql-code* value.

Problem determination

Determine which SQL statement in the application program caused the error and see if it is reproducible. Follow the diagnosis approach suggested for the SQLCODE that is identified *sql-code* value.

Related concepts

SQL codes (Db2 Codes)

DSN8062E ***csect*** **AN OBJECT WAS NOT SELECTED**

Explanation

You did not specify an object code on the input line.

User response

Select one of the object codes listed on the panel.

DSN8064E ***csect*** **INVALID DL/I STC-CODE ON GU MSG:** ***status-code***

Explanation

In attempting to get a message from IMS, an unexpected status-code was received.

System action

The application program is terminated.

Problem determination

Refer to the messages and codes manual for IMS/VS to determine the reason for the unexpected status code.

DSN8065E ***csect*** **INVALID DL/I STC-CODE ON ISRT MSG:** ***status-code***

Explanation

In attempting to insert a message for IMS, an unexpected status-code was received.

System action

The application program is terminated.

Problem determination

Refer to the messages and codes manual for IMS/VS to determine the reason for the unexpected status code.

DSN8066E ***csect*** **UNSUPPORTED PFK OR LOGIC ERROR**

Explanation

The sample application found an unsupported program function key or logic error while trying to execute a request.

System action

The request was not executed successfully.

User response

Report the error in the application program.

DSN8067E ***csect*** **UNSUPPORTED SEARCH CRITERIA FOR OBJECT**

Explanation

You entered a search criteria value and an object value that do not find any selections.

System action

The request was not executed successfully.

User response

Enter new search criteria values.

Problem determination

If the values you entered are expected to provide valid selections, check the contents of the view and the underlying tables to see if the data differs from what is expected. If after checking the view and the underlying tables, you find the search criteria values you entered should provide valid selections, the error is in the sample program. Report the error.

DSN8068E ***csect*** **INVALID REQUEST SHOULD BE 'L' OR 'U'**

Explanation

The input must begin with 'L' or 'U'.

System action

The request is ignored.

User response

Correct the input request.

DSN8069E ***csect*** **NO VALID SELECTIONS QUALIFY FOR THIS REQUEST**

Explanation

You entered a search criteria value and a data values that do not find any selections.

System action

The request was not executed successfully.

User response

Enter new search criteria values.

Problem determination

If the criteria values you entered are expected to provide valid selections, check the contents of the view and the underlying tables to see if the data differs from what is expected. If after checking the view and the underlying tables, you find the search criteria values you entered should provide valid selections, the error is in the sample program. Report the error.

DSN8070E ***csect*** **VITAL DATA IS MISSING IN TABLE TOPTVAL**

Explanation

No valid entries exist in the table that contains possible valid entries.

System action

The request was not executed successfully.

User response

There is no valid entry you can enter. Report the error in the sample program.

DSN8072E ***csect*** **INVALID SELECTION ON SECONDARY SCREEN**

Explanation

You gave an invalid line number.

System action

The request was not executed successfully.

User response

You entered a number that is not in the list on the left under the heading NO for line number. Enter a valid number.

Problem determination

If the line number you entered is in the list on the left under the heading NO for line number, then the error is in the sample program.

DSN8073E ***csect*** **SPECIFIED LINE-NUMBER NOT FOUND IN PREVIOUS SCREEN**

Explanation

You gave an invalid line number.

System action

The request was not executed successfully.

User response

You entered a number that is not in the list on the left under the heading NO for line number. Enter a valid number. If the line number is in the previous screen, then this is an error in the sample program. Report the error.

DSN8074E ***csect*** **DATA IS TOO LONG FOR SEARCH CRITERIA**

Explanation

You entered a data value that has too many characters for the type of search criterion you selected. For example, department ids have a maximum of 3 characters and most other ids have a maximum of 6 characters.

System action

The request was not executed successfully.

User response

Enter a data value with the correct number of characters.

DSN8075E ***csect-name*** **MESSAGE FORMAT ROUTINE ERROR, RETURN CODE IS:** ***sql-code***

Explanation

There is an error in the parameters passed to the SQLCA formatting routine, DSNTIAR.

System action

The SQLCA could not be formatted properly.

User response

This is an error in the program. Report the error to the application programmer.

Related concepts

DSNTIAR (Db2 Application programming and SQL)

Related tasks

Displaying SQLCA fields by calling DSNTIAR (Db2 Application programming and SQL)

Related reference

Possible return codes from DSNTIAR (Db2 Application programming and SQL)

DSN8076E ***csect*** **VITAL DATA IS MISSING IN TABLE 'TDSPTXT'**

Explanation

No valid entries exist in the table that contains possible valid entries.

System action

The request was not executed successfully.

User response

There is no valid entry you can enter. Report the error in the application program.

DSN8079E **CONNECTION TO at DB2 NOT ESTABLISHED**

Explanation

Sample programs DSN8SC3, DSN8SP3, and DSN8HC3 cannot be called directly from TSO. Instead, they must be called from the ISPF sample connection manager, DSN8SCM or DSN8SPM.

System action

The program ends.

User response

Call DSN8SCM or DSN8SPM through the connection manager.

DSN8080E **APPLICATION TERMINATED WITH CALL ATTACH REASON CODE** ***reason-code***

Explanation

The call attachment facility service requested by the application program did not execute successfully.

System action

The requested service is not executed.

System programmer response

Check the call attachment facility reason code.

User response

Notify the system programmer.

Problem determination

Follow the failure analysis procedures for the call attachment facility reason code.

DSN8081E RESULTS FROM THE CALL ATTACH TRANSLATE SERVICE

Explanation

The call attachment facility OPEN service that was requested from the application program did not execute successfully. The TRANSLATE service was requested to provide information about the OPEN failure.

System action

The requested OPEN service was not executed.

User response

If you suspect an error in Db2, you might need to report the problem. For information about identifying and reporting the problem, see Collecting diagnostic data (Collecting data).

Related reference

CAF return codes and reason codes (Db2 Application programming and SQL)

DSN8082E THE DISCONNECT TERMINATED WITH REASON CODE *reason-code*

Explanation

The call attachment facility DISCONNECT service requested by the application program did not execute successfully.

System action

The requested DISCONNECT service is not executed.

System programmer response

Check the call attachment facility reason code.

User response

Notify the system programmer.

Problem determination

Follow the failure analysis procedures for the call attachment facility reason code.

DSN8083E AN UNKNOWN SERVICE *service* WAS REQUESTED

Explanation

The user is requesting an invalid service.

System action

The requested service was not executed.

System programmer response

The service request must be a valid call attachment facility service. Ensure that the request is one of the services supported by the call attachment facility.

User response

Notify the system programmer.

Problem determination

There is an error in the Sample Application Program.

DSN8200E *csect* INVALID DEPARTMENT NUMBER, EMPLOYEE NOT ADDED

Explanation

The employee number that is to be added refers to a department number that is not contained in the table DEPT.

System action

The employee number is not added.

User response

Ensure that the correct department number was entered.

Problem determination

List the contents of the department table DEPT.

DSN8202E *csect* EMPLOYEE NUMBER HAS DEPENDENT ROWS, NOT ERASED

Explanation

The employee number to be erased is the same as a responsible employee number in the table PROJ or an employee number in the table EMPPROJACT. The employee number cannot be erased from the table EMP.

System action

No employee data is erased.

User response

Ensure that the correct employee number was entered.

Problem determination

List the contents of the PROJ and EMPPROJACT tables.

DSN8203E ***csect*** **INVALID WORK DEPT, EMPLOYEE NOT UPDATED**

Explanation

The employee that is to be updated has a department number that is not contained in the table DEPT. The update cannot be completed.

System action

No employee data is updated.

User response

Ensure that the correct department number was entered.

Problem determination

List the contents of the employee table DEPT.

DSN8210I ***csect*** **INVALID MGRNO, DEPARTMENT NOT ADDED**

Explanation

The department that is to be added has a manager number that is not contained in the table EMP. The add cannot be completed.

System action

No department is added.

User response

Ensure that the correct manager number was entered.

Problem determination

List the contents of the employee table EMP.

DSN8212E ***csect*** **DEPARTMENT NUMBER HAS DEPENDENT ROWS, NOT ERASED**

Explanation

The department number that is to be erased is the same as a project department number in table PROJ. The department cannot be erased.

System action

No department data is erased.

User response

Ensure that the correct department number was entered.

Problem determination

List the contents of the project table PROJ.

DSN8213E ***csect*** **INVALID ADMIN DEPT ID, DEPARTMENT NOT ADDED**

Explanation

The department that is to be added has a department number that is not contained in the table DEPT. The add cannot be completed.

System action

No department is added.

User response

Ensure that the correct department number was entered.

Problem determination

List the contents of the employee table DEPT.

DSN8214E ***csect*** **INVALID MANAGER ID, DEPARTMENT NOT UPDATED**

Explanation

The department that is to be updated has a manager number that is not contained in the table EMP. The update cannot be completed.

System action

No department data is updated.

User response

Ensure that the correct manager number was entered.

Problem determination

List the contents of the employee table EMP.

DSN8215E ***csect*** **INVALID ADMIN DEPT ID, DEPARTMENT NOT UPDATED**

Explanation

The department that is to be updated has a administrative department number that is not in the table DEPT. The update cannot be completed.

System action

No department data is updated.

User response

Ensure that the correct department number was entered.

Problem determination

List the contents of the employee table DEPT.

DSN8216E ***csect*** **DEPT NOT AT SPECIFIED LOCATION, EMPLOYEE NOT ADDED**

Explanation

The employee number that is to be added refers to a department number whose LOCATION field in the DEPT table is different from that specified for the employee. The add cannot be completed.

System action

No employee is added.

User response

Ensure that the correct department number was entered.

Problem determination

List the contents of the department table DEPT.

DSN8217E ***csect*** **DEPT NOT AT SPECIFIED LOCATION, EMP NOT UPDATED**

Explanation

The employee number that is to be updated refers to a department number whose LOCATION field in the DEPT table is different from that specified for the employee. The update cannot be completed.

System action

No employee data is updated.

User response

Ensure that the correct department number was entered.

Problem determination

List the contents of the department table DEPT.

DSN8220E ***csect*** **INVALID PROJECT NUMBER, ACTIVITY NOT ADDED**

Explanation

The activity that is to be added contains a project number that is not contained in the table PROJ. The add cannot be completed.

System action

The activity is not added.

User response

Ensure that the correct project number was entered.

Problem determination

List the contents of the project table PROJ.

DSN8222E ***csect*** **ACTIVITY HAS DEPENDENT ROWS, NOT ERASED**

Explanation

The activity that is to be erased from table PROJACT is the same as the corresponding activity in the table EMPPROJACT. The activity cannot be erased from the table PROJACT.

System action

No activity data is erased.

User response

Ensure that the correct activity was entered.

Problem determination

List the contents of the PROJACT and EMPPROJACT tables.

DSN8223E ***csect*** **ACTIVITY HAS DEPENDENT ROWS, NOT UPDATED**

Explanation

A start date in table PROJACT is to be updated, but there is a project staffing for this activity in table EMPPROJACT. The start date in table PROJACT cannot be updated.

System action

No activity data is updated.

User response

Ensure that the correct start date was entered.

Problem determination

List the contents of the project-activity-staffing table EMPPROJACT and project-activity table PROJACT.

DSN8230E ***csect*** **INVALID DEPARTMENT NUMBER, PROJECT NOT ADDED**

Explanation

The project that is to be added contains a department number that is not present in the table DEPT. The add cannot be completed.

System action

No project is added.

User response

Ensure that the correct department number was entered.

Problem determination

List the contents of the department table DEPT.

DSN8231E ***csect*** **INVALID RESPONSIBLE ID, PROJECT NOT ADDED**

Explanation

The project that is to be added contains an employee number that is not contained in the table EMP. The add cannot be completed.

System action

No project is added.

User response

Ensure that the correct employee number was entered.

Problem determination

List the contents of the employee table EMP.

DSN8233E ***csect*** **PROJECT NUMBER HAS DEPENDENT ROWS, NOT ERASED**

Explanation

A project number in table PROJ is to be erased, but it is the same as a project number in table PROJACT. The project cannot be erased from table PROJ.

System action

No project is erased.

User response

Ensure that correct project number was entered.

Problem determination

List the contents of the PROJ and PROJACT tables.

DSN8235E ***csect*** **INVALID MAJOR PROJECT ID, PROJECT NOT ADDED**

Explanation

The project that is to be added contains a major project ID that is not contained in the table PROJ. The add cannot be completed.

System action

No project is added.

User response

Ensure that the correct major project number was entered.

Problem determination

List the contents of the project table PROJ.

DSN8236E ***csect*** **INVALID ASSOCIATE DEPT ID, PROJECT NOT UPDATED**

Explanation

The project that is to be updated has a department number that is not contained in the table DEPT. The update cannot be completed.

System action

No project data is updated.

User response

Ensure that the correct department number was entered.

Problem determination

List the contents of the department table DEPT.

DSN8237E ***csect*** **INVALID RESPONSIBLE ID, PROJECT NOT UPDATED**

Explanation

The project that is to be updated has a employee number that is not contained in the table EMP. The update cannot be completed.

System action

No project data is updated.

User response

Ensure that the correct employee number was entered.

Problem determination

List the contents of the employee table EMP.

DSN8238E ***csect*** **INVALID MAJOR PROJECT ID, PROJECT NOT UPDATED**

Explanation

The project that is to be updated has a major project number that is not contained in the table PROJ. The update cannot be completed.

System action

No project data is updated.

User response

Ensure that the correct project number was entered.

Problem determination

List the contents of the project table PROJ.

DSN8240E ***csect*** **INVALID EMPLOYEE NUMBER, STAFFING NOT ADDED**

Explanation

The staffing that is to be added refers to an employee number that is not present in table EMP. The add cannot be completed.

System action

No staffing is added.

User response

Ensure that the correct employee number was entered.

Problem determination

List the contents of employee table EMP.

DSN8242E ***csect*** **INVALID PROJECT ACTIVITY DATA, STAFFING NOT ADDED**

Explanation

The staffing that is to be added refers to a project number, activity number, and start date that is not present in table PROJACT. The add cannot be completed.

System action

No staffing is added.

User response

Ensure that the correct project number, activity number, and start date were entered.

Problem determination

List the contents of the project table PROJACT.

DSN8243E ***csect*** **INVALID START DATE, STAFFING NOT UPDATED**

Explanation

The start date given is not currently in the project-activity table PROJACT. The update cannot be completed.

System action

No staffing data is updated.

User response

Ensure that the correct start date was entered.

Problem determination

List the contents of the project-activity table PROJACT and the project-activity-staffing table EMPPROJACT.

Chapter 27. DSN9 messages

Message identifiers that begin with DSN9 communicate information about the general command processor.

DSN9000I **KEYWORD *keyword-name* APPEARS MORE THAN ONCE**

Explanation

The same keyword (specified in the messages as 'keyword-name') appears more than once in the command. This message will be issued for each occurrence of the keyword after the first.

System action

Processing for the command is terminated.

System programmer response

Correct the command by using the keyword only once, and reenter the command.

Problem determination

Obtain a copy of the system or terminal log to verify the command entry.

DSN9001I **KEYWORD *keyword-name* IS INVALID**

Explanation

The keyword (specified in the message as 'keyword-name') is unknown or undefined. The keyword might be misspelled, or the keyword may not be applicable to the command being processed.

System action

Processing for the command is terminated.

System programmer response

Correct the keyword, and reissue the command.

Problem determination

Obtain a copy of the system or terminal log to verify the command entry.

DSN9002I **UNBALANCED PARENTHESES WERE FOUND FOLLOWING KEYWORD *keyword-name***

Explanation

An invalid combination of parentheses has been encountered following the keyword (specified in the message as 'keyword-name'). Parenthesis must be paired open and close, and a close parenthesis must follow an open parenthesis before another open parenthesis is encountered.

System action

Processing for the command is terminated.

System programmer response

Correct the error, and reissue the command.

Problem determination

Obtain a copy of the system or terminal log to verify the command entry.

DSN9003I **KEYWORD *keyword-name* PARAMETER CONTAINS UNBALANCED APOSTROPHES**

Explanation

An odd number of apostrophes is present in a parameter. If the parameter is a quoted string, it must have one apostrophe at each end of the string. If an apostrophe is to appear within the string, two adjacent apostrophes must be entered. If the parameter is a hexadecimal value, it must be entered as X'hex characters'.

System action

Processing for the command is terminated.

System programmer response

Correct the error, and reissue the command.

Problem determination

Obtain a copy of the system or terminal log to verify the command entry.

DSN9004I **KEYWORD *keyword-name* RANGE (*c*) INCORRECTLY SPECIFIED**

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Explanation

The range for a keyword (specified in the message as 'keyword-name') was incorrectly specified using the syntax character specified in the message as *c*. The standard syntax character used to denote a range is a colon (:). Either the ending limit of the range was omitted or a subset was specified within the range.

Examples of this error are LINE(1:) and GROUP(A*:B*).

Examples of a correctly specified range are LINE(1:3) and GROUP(A:B).

System action

Processing for the command is terminated.

System programmer response

Correct the error, and reissue the command.

Problem determination

Obtain a copy of the system or terminal log to verify the command entry.

Related information

About Db2 and related commands (Db2 Commands)

DSN9005I KEYWORD *keyword-name* SUBSET (c) INCORRECTLY SPECIFIED

Explanation

The subset for a keyword (specified in the message as *keyword-name*) was incorrectly specified for use with the syntax character 'c' in the message. The standard syntax character used to denote a subset is an asterisk (*).

For example, consider a group of objects named BLACK, BLUE, GREEN, RED, and WHITE. You may either explicitly specify BLACK and BLUE, or you may specify BL*, meaning all members of the group whose names begin with BL. The character that follows the asterisk must be a blank, comma, close parenthesis, or colon.

Examples of such an error are NAME(BL*CK) and NAME(*LUE).

Examples of correct specification are NAME(BL*) and UNIT(2*).

System action

Processing for the command is terminated.

System programmer response

Correct the error, and reissue the command.

Problem determination

Obtain a copy of the system or terminal log to verify command entry.

Related information

About Db2 and related commands (Db2 Commands)

DSN9006I KEYWORD *keyword-name* ASTERISK (c) INCORRECTLY USED

Explanation

For the keyword specified in the message (as *keyword-name*), an asterisk (c) was used as the first character of a parameter to specify ALL. However, the asterisk appears in a list, or the characters in juxtaposition are not a blank, comma, equal sign, or parentheses.

Examples of such errors are LINE(LINE1,*,LINE7), NAME(**), and GROUP(PQR:*).

Examples of correct specification are UNIT(*) and LINE=* etc.

System action

Processing for the command is terminated.

System programmer response

Correct the error, and reissue the command.

Problem determination

Obtain a copy of the system or terminal log to verify command entry.

Related information

About Db2 and related commands (Db2 Commands)

DSN9007I THIS COMMAND REQUIRES ONE OF THE FOLLOWING KEYWORDS BE SPECIFIED, *keyword-list*

Explanation

One of the keywords identified in the *keyword-list* list must be specified on this command, but none of these keywords was present.

System action

Processing for the command is terminated.

System programmer response

Identify the appropriate keyword from the list, include that keyword, and reissue the command.

Problem determination

Obtain a copy of the system or terminal log to verify command entry.

Related information

About Db2 and related commands (Db2 Commands)

DSN9008I KEYWORD *keyword-name* MAY NOT BE NEGATED

Explanation

The negation characters (NO) appear in front of the keyword (specified in the message as *keyword-name*), but negating this keyword is not allowed. As an example, consider a keyword called PRINT that could indicate that you want something printed. If you did not want the material to be printed, you might specify NOPRINT. This process of prefixing a keyword with the characters NO is called negation. While negation may be meaningful on some keywords, it is not allowed on all keywords.

System action

Processing for the command is terminated.

System programmer response

Reenter the command, but do not negate the named keyword.

Problem determination

Obtain a copy of the system or terminal log to verify the command entry.

Related information

About Db2 and related commands (Db2 Commands)

DSN9009I KEYWORD *keyword-name* IS MISSING AND MUST BE SPECIFIED

Explanation

The keyword specified in the message (as 'keyword-name') must be present, but it was not entered. This keyword must be present in order for the command to process properly.

System action

Processing for the command is terminated.

System programmer response

Enter the command again, and include the specified keyword.

Problem determination

Obtain a copy of the system or terminal log to verify the command entry.

DSN9010I REQUIRED PARAMETER FOR KEYWORD *keyword-name* IS MISSING

Explanation

A parameter must be specified for the keyword specified in the message (as 'keyword-name'), but no parameter was entered.

As an example of this error, consider a keyword called PRIORITY whose value can range 0 - 9. Specification of PRIORITY(1) is acceptable, but, if you specify PRIORITY with no parameter value, the keyword is meaningless.

System action

Processing for the command is terminated.

System programmer response

Supply appropriate parameters for the specified keyword and reissue the command.

Problem determination

Obtain a copy of the system or terminal log to verify the command entry.

Related information

About Db2 and related commands (Db2 Commands)

DSN9011I PARAMETER(S) CANNOT BE SPECIFIED FOR KEYWORD *keyword-name*

Explanation

No parameters can be specified for the keyword specified in the message as *keyword-name*. You may have misspelled the keyword-name, causing it to be interpreted as a different keyword, or the parameter may actually belong with another keyword instead of the one on which you entered it.

System action

Processing for the command is terminated.

System programmer response

Correct the error, and reissue the command.

Problem determination

Obtain a copy of the system or terminal log to verify the command entry.

Related information

About Db2 and related commands (Db2 Commands)

DSN9012I **KEYWORD *keyword-name* PARAMETER(S) MUST BE HEXADECIMAL**

Explanation

Parameter values for the keyword specified in the message (as 'keyword-name') must be hexadecimal values. The value must be specified as X'hex characters'. Hexadecimal characters are defined as the numeric digits 0 through 9 and the letters A through F. Either uppercase or lowercase is acceptable for the letters A through F.

As an example of this error, consider the keyword OFFSET, for which you are expected to enter a hexadecimal value. If you enter OFFSET(X'2C'), it is acceptable. However, entering OFFSET(Jones) is not acceptable.

System action

Processing for the command is terminated.

System programmer response

Reissue the command, but ensure that the parameters for the named keyword are hexadecimal values.

Problem determination

Obtain a copy of the system or terminal log to verify the command entry.

DSN9013I **KEYWORD *keyword-name* PARAMETER *parameter value* EXCEEDS ALLOWABLE LENGTH OF *nn***

Explanation

The parameter value (specified in the message as *parameter value*) exceeds the limit of *nn* characters in length.

As an example of this type of error, consider a PRIORITY keyword whose value may range from zero to nine. If you specify PRIORITY(21) or PRIORITY(006), the value you have entered exceeds the limit of one character.

System action

Processing for the command is terminated.

System programmer response

Correct the error, and reissue the command.

Problem determination

Obtain a copy of the system or terminal log to verify the command entry.

Related information

About Db2 and related commands (Db2 Commands)

DSN9014I **KEYWORD *keyword-name* LIMIT OF *nn* PARAMETER(S) EXCEEDED**

Explanation

Too many parameters have been specified for the keyword that is specified in the message. The command processor does not accept more than the limit of parameters, which is specified by the value of *nn*. This error is probably caused by entering too many parameters. It could also be caused by a missing close parenthesis that has not yet been detected.

System action

Processing for the command is terminated.

System programmer response

Reissue the command, and enter no more than the specified limit of parameters for the given keyword. If necessary, issue the command more than once to process all the parameter values.

Problem determination

Obtain a copy of the system or terminal log to verify the command entry.

Related information

About Db2 and related commands (Db2 Commands)

DSN9015I **PARAMETER *parameter-value* IS UNACCEPTABLE FOR KEYWORD *keyword-name***

Explanation

The parameter value specified in the message is not an acceptable value for the named keyword.

As an example, consider a keyword called PRINT that can have parameters of YES or NO. Specification of PRINT(YES) or PRINT(NO) is valid. However, specification of PRINT(MAYBE) is unacceptable.

System action

Processing for the command is terminated.

System programmer response

Correct and reissue the command.

Problem determination

Obtain a copy of the system or terminal log to verify the command entry.

Related information

About Db2 and related commands (Db2 Commands)

DSN9016I *verb-name* COMMAND REJECTED, UNAUTHORIZED REQUEST

Explanation

The command specified in the message (as 'verb-name') requires that you have proper authorization in order to use the command. You do not have the required authorization.

System action

The command is not executed. Processing is terminated.

Operator response

If the command must be executed on behalf of the user and your installation operating procedures permit it, enter the command on request.

System programmer response

Contact the system programmer responsible for system security, and request that this person grant you authorization to use the command. Otherwise, you must have someone who is authorized issue the command for you. If necessary, request the system operator to enter the command for you.

Problem determination

Obtain a copy of the system or terminal log to verify the command entry.

DSN9017I FAILURE WHILE PROCESSING *verb-name pkw-name* COMMAND, PROCESSING TERMINATED

Explanation

The Db2 command processor has abended while processing the command (specified in the message as 'verb-name pkw-name'). The error is been recorded in SYS1.LOGREC, and an SVC dump is requested. The command may have partially completed. Refer to any prior response messages to determine what has been done.

System action

Processing for the command is terminated.

Operator response

If a dump was produced, have it printed. Print a copy of the contents of the SYS1.LOGREC data set for the time period involved. Forward these items with a copy of the system log to the system programmer.

System programmer response

Reissue the command. If a second failure occurs, consult your supervisor.

Problem determination

Obtain a copy of the system or terminal log to verify command entry. Contact the system operator to make sure that diagnostic information is forwarded to you.

DSN9018I *csect-name* ABORTING *verb-name* PROCESSING DUE TO INSUFFICIENT STORAGE AVAILABLE

Explanation

The command processor was unable to obtain sufficient storage to complete processing of any response messages generated by the invoked command.

System action

Processing for the command is terminated abnormally.

Operator response

Notify the system programmer before attempting to reissue the command.

System programmer response

Determine the reason for insufficient storage available to the command. If a cursory examination of the system indicates that the region sizes for Db2 are sufficient, and the current workload does not seem excessive, an MVS Console dump (MVS DUMP command) might be required.

Ensure that any retry steps defined by the command are performed prior to reissuing the command.

Problem determination

The invoked command had completed processing and returned to the command preprocessor when an attempt was made to obtain storage from the address space from which the command was entered. Because sufficient storage was unavailable, no response messages from the invoked command are available.

DSN9019I VERB *verb-name* IS NOT A KNOWN COMMAND

Explanation

The command represented by the verb specified in the message is not known to the system; it is an undefined command. A possible cause for this error is that you made a spelling error while entering the command.

System action

Processing for the command is terminated.

System programmer response

Correct the format of the command and reissue it.

Problem determination

Obtain a copy of the system or terminal log to verify the command entry.

Related information

About Db2 and related commands (Db2 Commands)

DSN9020I ONLY ONE OF THE FOLLOWING KEYWORDS MAY BE SPECIFIED ON THIS COMMAND, *keyword-list*

Explanation

Only one of the identified keywords in the *keyword-list* list can be specified at the same time on this command.

System action

Processing for the command is terminated.

System programmer response

Identify the appropriate keyword from the list, include only that keyword, and reissue the command.

Problem determination

Obtain a copy of the system or terminal log to verify the command entry.

Related information

About Db2 and related commands (Db2 Commands)

DSN9021I VERB *verb-name* REQUIRED KEYWORD IS MISSING

Explanation

The command specified in the message (as *verb-name*) was entered, but at least one required keyword is missing. The command processor was unable to determine which keyword or keywords were missing.

System action

Processing for the command is terminated.

System programmer response

Correct the format of the named command, and reissue the command.

Problem determination

Obtain a copy of the system or terminal log to verify command entry. If a failure is suspected, take a storage dump.

Related information

About Db2 and related commands (Db2 Commands)

DSN9022I *csect-name* '*verb-namepkw-name*' NORMAL COMPLETION

Explanation

All synchronous processing for the specified command completed successfully. Any tasks executing asynchronously for the specified command might still be executing when this message is displayed.

csect-name
The name of the control section that issued the message.

verb-namepkw-name
The command name.

System action

Synchronous processing for the specified command is complete. Any subsequent system actions are described in the information for the specified command.

Related information

About Db2 and related commands (Db2 Commands)

DSN9023I ***csect-name verb-name pkw-name*** **ABNORMAL COMPLETION**

Explanation

The command specified in the message as 'verb-name pkw-name' completed unsuccessfully. The command issued one or more error messages before this message. The name of the CSECT that issued the message is shown at the beginning of the message as a diagnostic aid.

System action

Processing for the command ended.

System programmer response

Proceed as indicated by previous error messages.

DSN9024I **KEYWORD *keyword-name* PARAMETER MAY NOT SPECIFY A RANGE OF VALUES**

Explanation

The parameter of the keyword specified in the message specifies a range using the colon operator, (for instance, 1:3), but a range of values is not allowed.

As an example, consider a keyword called CLASS. You might enter CLASS(1,2,3) to specify classes 1, 2, and 3, or you might enter CLASS(1:3). However, not all commands allow you to specify a range of values.

System action

Processing for the command is terminated.

System programmer response

Correct the keyword parameter, and reenter the command.

Problem determination

Obtain a copy of the system or terminal log to verify command entry.

DSN9025I ***csect-name verb-name pkw-name*** **NORMAL COMPLETION FOR SYNCHRONOUS PHASE, AND IN PROGRESS FOR ASYNCHRONOUS PHASE.**

Explanation

All synchronous processing for the command specified as *verb-name pkw-name* in this message completed successfully. Any tasks executing asynchronously for the specified command might still be executing when this message is displayed.

System action

Synchronous processing for the specified command is complete.

Related information

About Db2 and related commands (Db2 Commands)

DSN9026I **KEYWORD *keyword-name* PARAMETER(S) MUST BE ALPHABETIC**

Explanation

Parameter values for the KEYWORD *keyword-name* must be all alphabetic characters. *keyword-name* can consist of any combination of the 26 uppercase (A through Z) and 26 lowercase (a through z) letters of the English alphabet plus the three characters reserved as alphabetic extenders for national languages ($, #, and @).

An example of this type of error, is if in the keyword NAME field, you are expected to enter a person's last name. If you enter NAME(Jones) it is acceptable, but if you enter NAME(Jon4s), it is not acceptable because it contains numeric characters.

System action

Processing for the command is terminated.

System programmer response

Reissue the command but ensure that the parameters for the named keyword are of the required type.

Problem determination

Obtain a copy of the system or terminal log to verify the command entry.

DSN9027I **KEYWORD *keyword-name* PARAMETER(S) MUST BE ALPHAMERIC**

Explanation

Parameter values for the keyword *keyword-name* must consist of all numbers and alphabetic characters. *keyword-name* can consist of any combination of the 26 uppercase (A through Z) and 26 lowercase (a through z) letters of the English alphabet, plus the three characters reserved as alphabetic extenders for national languages ($, #, and @), as well as numeric characters.

System action

Processing for the command is terminated.

System programmer response

Reissue the command but ensure that the parameters for the named keyword are of the required type.

Problem determination

Obtain a copy of the system or terminal log to verify the command entry.

DSN9028I **KEYWORD *keyword-name* PARAMETER(S) MUST BE NUMERIC**

Explanation

Parameter values for the keyword (specified on these messages) must be of a specific type, such as all ALPHABETIC or all ALPHAMERIC / NATIONAL characters, or all NUMERIC values.

As an example of this type of error, consider the keyword NAME, where you are expected to enter a person's last name. If you enter NAME(Jones) it is acceptable, but if you enter NAME(Jon4s), it is not acceptable.

As a second example, consider a keyword WEIGHT that specifies a numeric weight. Entering WEIGHT(47) is acceptable, but entering WEIGHT(4u) is not.

System action

Processing for the command is terminated.

System programmer response

Reissue the command but ensure that the parameters for the named keyword are of the required type.

Problem determination

Obtain a copy of the system or terminal log to verify the command entry.

DSN9029I ***csect-name* FAILURE WHILE PROCESSING A COMMAND**

Explanation

A failure has been encountered while processing a command. The command may or may not have been executed. The error has been recorded in the system error log (the SYS1.LOGREC data set), and an SVC dump was attempted.

System action

Processing for the command is terminated.

Operator response

If a dump was produced, have it printed. Print a copy of the contents of the SYS1.LOGREC data set for the time period involved. Forward these items with a copy of the system log to the system programmer.

System programmer response

Reissue the command. If a second failure occurs, consult your supervisor or the system programmer.

Problem determination

Obtain a copy of the system or terminal log to verify command entry. Contact the system operator to make sure that diagnostic information is forwarded to the system programmer.

DSN9030I **KEYWORD *keyword-name* PARAMETER MAY NOT SPECIFY A SUBSET OF VALUES**

Explanation

The parameter for the keyword specified in the message identifies a subset using the asterisk operator (for instance, ABC*, *ABC, or *ABC*DEF*), but using a subset is not allowed for this command.

As an example, consider a keyword called NAME, for which you can specify people's names. You might specify NAME(ROBERT ROBERTS ROBERTSON) to enter three names, or you might specify NAME(ROB*) to indicate all names that begin with the characters ROB. NAME(*BERT*) could also be specified to indicate all names that contain the characters BERT within the name. However, not all commands allow you to specify a subset of values in this way.

System action

Processing for the command is terminated.

System programmer response

Correct the keyword parameter, and reenter the command.

Problem determination

Obtain a copy of the system or terminal log to verify command entry.

DSN9031I SYNTAX ERROR DETECTED FOLLOWING KEYWORD *keyword-name*

Explanation

The text that follows the named keyword contains invalid syntax.

As an example, consider specification of CLASS==A. The double equal signs do not conform to the rules of syntax and make the keyword meaningless. This is just one example of invalid syntax. It is not practical to try to illustrate every possible error here. You could, however, correctly specify CLASS=A or CLASS(A).

System action

Processing for the command is terminated.

System programmer response

Examine the text following the named keyword to ensure that no errors were made as the command was entered. Ensure that you have followed the rules for command entry, and reenter the command.

Problem determination

Obtain a copy of the system or terminal log to verify command entry.

DSN9032I REQUESTED FUNCTION IS NOT AVAILABLE

Explanation

An attempt was made to invoke a command processor that was not loaded. An example of this is invoking -START DDF or -STOP DDF when DDF is not loaded (not selected during the installation process).

System action

The requested function is not performed.

User response

Determine what function was requested. Do not invoke this function until Db2 is reinstalled and DDF is selected.

Problem determination

Look at the console log to determine which command caused the error.

DSN9033I KEYWORD *name1* REQUIRES KEYWORD *name2*

Explanation

When keyword 'name1' is specified, keyword 'name2' must also be specified.

System action

Processing for the command terminates.

User response

Resubmit the command with the missing keyword.

Problem determination

Obtain a copy of the system or terminal log to verify the command entry.

DSN9034I THE TOTAL LENGTH OF COMMAND RESPONSE MESSAGES EXCEEDED ITS LIMIT. DISPLAY IS TERMINATED.

Explanation

The total length of all response messages returned from a single Db2 command exceeded the internal limit set by the system. The message chain was truncated. This message was appended at the end of the chain to inform the user of the termination of the report.

DSN9035I BEGIN OF DISPLAY FOR MEMBER: *memname*

Explanation

This message precedes the command output from another member of a data sharing group as the result of the SCOPE(GROUP) keyword. The message number is not included in this message.

memname
Member name for which command output is being displayed.

System action

Processing continues normally.

DSN9036I

Explanation

This message underscores message DSN9035I and separates the command output from another member of a data sharing group as the result of the

SCOPE(GROUP) keyword. The message number is not included in this message.

System action

Processing continues normally.

DSN9037I **END OF DISPLAY FOR MEMBER: *memname***

Explanation

This message follows messages DSN9035I, DSN9036I, and the command output from another member of a data sharing group as the result of the SCOPE(GROUP) keyword and indicates that the output was generated successfully. The message number is not included in this message.

memname
Member name for which command output is being displayed.

System action

Processing continues normally.

DSN9038I ***csect-name* COMMAND REJECTED BECAUSE DB2 WAS RESTARTED IN LIGHT MODE**

Explanation

This command is not allowed when the Db2 member has been restarted with the LIGHT(YES) parameter.

System action

Command processing is halted.

System programmer response

Refrain from issuing this command on this Db2 member until after the member has been restarted without LIGHT(YES). If the command has group scope, then you may be able to issue the command to a different Db2 member in the group.

DSN9040I ***member-name* COMMAND '*command-name*' PROCESS FAILED. SECURITY SERVER FAILED TO CREATE A NEW ACEE FOR '*authorization-ID*' USING RACROUTE REQUEST VERIFY SECURITY SERVER RETURN CODE *return-code* SECURITY SERVER REASON CODE *reason-code***

Explanation

The *command-name* command failed to process because the security server failed to create a new access control environment element (ACEE) when using RACROUTE REQUEST=VERIFY.

member-name
The member where the ACTIVATE command was attempted.

command-name
The command that was issued.

authorization-ID
The authorization ID.

return-code
The return code that was returned from a security server, such as RACF.

reason-code
The reason code that was returned from a security server, such as RACF.

System action

Processing for the *command-name* command is terminates.

User response

Contact the system administrator to regain access.

System administrator response

Verify that the authorization ID is defined to the security server.

Appendix A. New, changed, and deleted messages

Messages are added to, changed in, and removed from Db2 11 for z/OS, as necessary.

Lists of new, changed, and deleted messages are available exclusively in the online version of this information.

New, changed, and deleted messages

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Appendix B. z/OS diagnostic services

Db2 uses functional recovery routines that run MVS and z/OS services to provide diagnostic information for assistance in problem determination.

Functional recovery routines used by Db2 run MVS and z/OS services to provide diagnostic information for assistance in problem determination. The following MVS services provide diagnostic information:

SVC dumps
The Db2 abend completion code X'04E' uses the MVS SDUMP service to create SVC dumps. The content and storage areas associated with these dumps vary depending on the specific error and the state of the Db2 subsystem at the time the error.

SYS1.LOGREC entries
Entries are requested in the SYS1.LOGREC data set at the time of the error using the MVS SETRP service. The following are also recorded in SYS1.LOGREC:

- Subsystem abnormal terminations
- Secondary abends that occur in a recovery routine
- Recording requests from recovery routines percolated to by the recovery termination manager.

Variable recording area (VRA) data
Data entries are added to the VRA of the SDWA by using an MVS VRA defined key. VRA data includes a series of diagnostic data entries common to both Db2 abend completion codes. Additional information is provided by the invoking subcomponent recovery routine during initial error processing or recovery termination manager percolation.

During Db2 operation, an abend can occur with an MVS system completion code.

If you receive an MVS abend during Db2 operation, refer to the appropriate MVS publication.

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Appendix C. Resource types

Type codes are associated with particular types of resources.

The following table describes the type of resource associated with the type codes. The abbreviations in the "Name, Content, Format" column are explained in Table 7 on page 1174.

Table 6. Resource Types

TYPE Code	Type of Resource	Name, Content, Format
00000100	Database	DB
00000200	Table space	DB.SP
00000201	Index space	DB.SP
00000202	Table space	RD.DB.TS
00000205	Compression Dictionary	DB.SP
00000210	Partition	DB.SP.PT
00000220	Data set	DSN
00000230	Temporary file	SZ
00000240	Database procedure	DBP
00000300	Page	DB.SP.PG
00000301	Index minipage	DB.SP.PG.MP
00000302	Table space page	DB.SP.PG
00000303	Index space page	DB.SP.PG
00000304	Table space RID	DB.SP.RID
00000305	Index access/table space RID	DB.SP.RID
00000306	Index access/table space page	DB.SP.PG
00000307	Index space EOF	DB.SP.01
00000400	ICF catalog	IC
00000401	Authorization function	
00000402	Security Server	SAF/RACF return/reason codes
00000500	Storage group	SG
00000602	EDM DBD Space	
00000603	EDM DYNAMIC STATEMENT Space	
00000604	EDM skeleton storage	
00000605	EDM above-the-bar storage	
00000606	EDM below-the-bar storage	
00000700	Buffer pool space	BP
00000701	Group buffer pool	GBP

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Table 6. Resource Types (continued)

TYPE Code	Type of Resource	Name, Content, Format
00000800	Plan	PL
00000801	Package	COLLECTION.PACKAGE.-CONTOKEN
00000802	BINDLOCK01 through BINDLOCK20	BINDLOCK01 through BINDLOCK20
00000900	32KB data area	
00000901	Sort storage	
00000903	Hash anchor	DB.SP.PG.AI
00000904	RIDLIST storage	
00000905	IRLM storage	
00000906	Db2	MEMBER
00000907	LOB storage	
00000908	Basic Floating Point Extensions Facility	
00000909	Extended Time-of-Day (TOD) Clock	
0000090A	XML storage	
00000A00	Table	RD.CR.TB
00000A10	Alias	RELDEP. OWNER. ALIAS. RD.CR.AL
00000A11	Distinct type	SC.DT
00000A12	User-defined function	SC.SN
00000A13	Stored procedure	SC.SN
00000A14	Sequence	
00000A16	Role	
00000A17	Trigger	
00000B00	View	RD.CR.VW
00000C00	Index	RD.CR.IX
00000C01	Index	CR.IX
00000D00	DBID/OBID	RD.DI.OI
00000D01	DBID/OBID	DI.OI
00000D02	OBID	OI
00000E00	SU limit exceeded	CN
00000F00	Auxiliary column	DI.OI. ROWID. COLN or DI.OI. DOCID. COLN
00000F01	LOB lock	DIX.PIX. ROWID. VRSN
00000F81	XML lock	DIX.PIX. DOCID

Table 6. Resource Types (continued)

TYPE Code	Type of Resource	Name, Content, Format
00001000	DDF	LOCATION or SUBSYSTEM ID
00001001	System conversation	LU.MODE. RTNCD. FDBK2. RCPRI. RCSEC. SENSE
00001002	Agent conversation	LU.MODE. RTNCD. FDBK2. RCPRI. RCSEC. SENSE
00001003	CNOS processing	LU. MODE. RTNCD. FDBK2. RCPRI. RCSEC. SENSE
00001004	CDB (Communication database)	LOCATION. AUTHORIZATION ID. PL
00001005	DB access agent	LOCATION
00001006	DRDA-related error	
00001007	TCP/IP domain name	LINKNAME. DOMAIN. ERRNO
00001008	TCP/IP service name	LOCATION. SERVICE. ERRNO
00001080	ACCEL	SERVER.DOMAIN
00001102	Bootstrap data set (BSDS)	MEMBER
00001202	Dynamic Statement Cache	MEMBER.STMTID
00002000	Table space CS-claim class	DB.SP
00002001	Table space RR-claim class	DB.SP
00002002	Table space write-claim class	DB.SP
00002003	Index space CS-claim class	DB.SP
00002004	Index space RR-claim class	DB.SP
00002005	Index space write-claim class	DB.SP
00002006	Table space partition CS-claim class	DB.SP.PT
00002007	Table space partition RR-claim class	DB.SP.PT
00002008	Table space partition write-claim class	DB.SP.PT
00002009	Index space partition CS-claim class	DB.SP.PT
00002010	Index space partition RR-claim class	DB.SP.PT
00002011	Index space partition Write-claim class	DB.SP.PT
00002100	Table space DBET entry	DB.SP
00002101	Index space DBET entry	DB.SP
00002102	Table space partition DBET entry	DB.SP.PT
00002103	Index space partition DBET entry	DB.SP.PT
00002104	Logical partition DBET entry	DB.SP.PT
00002105	DBET hash chain lock timeout	INTERNAL LOCK NN DP.SP, DBID.PSID, or none
00002200	Routine parameter storage	DBP

Table 6. Resource Types (continued)

TYPE Code	Type of Resource	Name, Content, Format
00002201	Debug agent storage	DBP
00002300	ICSF encryption and decryption facilities	
00003000	Code (release maintenance_level or system parameter)	REL, APAR, ZPARM
00003002	Number of Stored Procedures	
00003072	Index	
00003073	Index	
00003328	Release dependency	
00003329	DBID/OBID	DI.OI
00003330	OBID limit exceeded	
00003840	LOB column	
00004000	Profile exception threshold exceeded	PID.PTYPE.PNAME

The following table contains the definitions for the acronyms provided for the "Name, Content, Format" column of the preceding table, Table 6 on page 1171.

Table 7. Definitions for resource type name, content, and format

Where	Stands for
AI	Hash anchor ID
ALIAS	Alias owner
APAR	APAR number
AUTHORIZATION ID	Db2 authorization identifier
BP	Buffer pool identifier
CN	Column name
COLLECTION	Collection-ID of the package
COLN	Column number within the base table of the LOB column that has been marked invalid.
CONTOKEN	Consistency token of the package
CR	Creator of the object
DB"1" on page 1176	Database name
DBP	Database procedure name
DI	DBID in decimal of resource
DIX	DBID in hexadecimal
DOMAIN	TCP/IP domain name or IP address
DSN	Data set name
FDBK2	VTAM secondary return code
GBP	Group buffer pool name

Table 7. Definitions for resource type name, content, and format (continued)

Where	Stands for
IC	ICF catalog alias name
IX	Index name
LOCATION	Location in which the specified resource is not available
LU	Logical unit name
MEMBER	Group member name
MODE	Logical unit mode name
MP	Hexadecimal mini-page number
NN	Decimal number of the hash chain
OI	OBID in decimal of resource
OWNER	Alias owner
PACKAGE	Package identifier
PG	Hexadecimal page number
PID	Profile ID
PIX	PSID in hexadecimal
PL	Plan identifier
PNAME	The name of the profile filtering scope
PT	Decimal partition number
PTYPE	The type of the profile filtering scope
RCPRI	APPC primary return code
RCSEC	APPC secondary return code
RD"2" on page 1176	Db2 release dependency mark
REL	Db2 release name
RELDEP	Db2 release dependency mark
RID	Record Identifier
RTNCD	VTAM primary return code
SENSE	SNA sense codename
SERVER	Accelerator server name
SG	Storage group name
SP	Space name
STMTID	The identifier of the statement in the dynamic statement cache.
SZ	Temporary file page size

Table 7. Definitions for resource type name, content, and format (continued)

Where	Stands for
ST	Space allocation type in work file database. This type is used when the value of the WFDBSEP subsystem parameter is YES. When this type (ST) is used with resource type 00000100 and reason code 00C90084, message DSNT501I specifies the missing resource name as `Db2-MANAGED SPACE WITHOUT SECONDARY ALLOCATION OR USER-MANAGED SPACE`. This resource name implies either an segmented (non-universal) table space that is managed by Db2 and has a SECQTY value of 0 or any user-managed table space. When this type (ST) is used with resource type 00000200 and reason code 00E7009A, SQLCODE -904 specifies the missing resource name as `Db2-MANAGED SPACE WITH SECONDARY ALLOCATION`. This resource name implies either a partition-by-growth table space regardless of the SECQTY value or a table space that is segmented (non-universal) with a non-zero value for SECQTY. **Related information:** SEPARATE WORK FILES field (WFDBSEP subsystem parameter) (Db2 Installation and Migration) “DSNT501I” on page 568 -904 (Db2 Codes)
TB	Table name
TS	Table space name
VW	View name

Notes:

1. DB can also refer to DI or ST. SP, TS, and TB can also refer to OI. TS can also refer to ST. Db2 sometimes does not have access to resource names, and uses DBID or OBID instead.
2. RD can be represented as a white space or blank to indicate no release dependency, or Y or N to indicate whether it is IBMREQD.

Appendix D. Service task plan names

Db2 service tasks use plan names.

Table 8. Db2 system plan names

Plan name	Usage
'ACT' + X'0000000000'	The plan for authorization
'BCT' + X'0000000000'	The plan for unallocated threads and Db2 service tasks
'DISTSERV'	The plan for a database access thread from an application using DRDA access
'DSNBIND' + X'00'	The plan for bind
'DSNUTIL'	The plan for utilities
'STARTCT' + X'00'	The plan for start-up
'?RRSAF '	The plan name for RRSAF CREATE THREAD with the *collection* parameter

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General-use Programming Interface and Associated Guidance Information

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Glossary

The glossary is available in IBM Knowledge Center.

See the Glossary topic for definitions of Db2 for z/OS terms.

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