IMS

Messages and Codes Volume 1

Version 9

GC18-7827-00

IMS

Messages and Codes Volume 1

Version 9

GC18-7827-00

Note

Before using this information and the product it supports, be sure to read the general information under “Notices” on page 665.

First Edition (October 2004)

This edition applies to Version 9 of IMS (product number 5655-J38) and to all subsequent releases and modifications until otherwise indicated in new editions.

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About This Book

This information is available as part of the DB2 Information Management Software Information Center for z/OS Solutions. To view the information within the DB2 Information Management Software Information Center for z/OS Solutions, go to http://publib.boulder.ibm.com/infocenter/dzichelp. This information is also available in PDF and BookManager formats. To get the most current versions of the PDF and BookManager formats, go to the IMS Library page at www.ibm.com/software/data/ims/library.html.

This book helps programmers, operators, and system support personnel diagnose IMS problems. It contains abend codes, messages, status codes, and return codes produced by IMS Version 9. The messages in this book are those that do not start with "DFS". The DFS-type messages are covered in *IMS Version 9: Messages and Codes, Volume 2*.

Summary of Contents

- "New, Changed, and Deleted Messages and Abends" on page xxi, lists all new messages and abends, changed messages, and deleted messages and abends for IMS Version 9.
- Chapter 1, "BPE Codes," on page 1 explains BPE abend and service return codes.
- Chapter 2, "CQS Codes," on page 13 explains CQS abend codes, restart and rebuild reason codes, and service return codes.
- Chapter 3, "CSL Codes," on page 29 explains Common Service Layer (CSL) user abend codes issued by the Operations Manager (OM), the Resource Manager (RM), and the Structured Call Interface (SCI).
- Chapter 4, "IMS Abend Codes, 0002 - 2991," on page 39, explains user abend codes issued by IMS. Most user abends are explained in more detail in *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.
- Chapter 5, "IMS Abend Codes 3000 - 4095," on page 141 explains user abend codes issued by IMS.
- Chapter 6, "BPE Messages," on page 167 explains the messages issued from the Base Primitive Environment (BPE).
- Chapter 7, "IMS Connect Messages," on page 183 explains the messages issued by IMS Connect error codes and messages.
- Chapter 8, "CQS Messages," on page 239 explains the messages issued by the Common Queue Server (CQS).
- Chapter 9, "CSL Messages," on page 267 explains the messages issued by the Common Service Layer (CSL), including, Operations Manager (OM), Resource Manager (RM), Single Point of Control (SPOC), and Structured Call Interface (SCI)
- Chapter 11, "DSP (DBRC) Messages," on page 313 explains messages and return codes from Database Recovery Control (DBRC) and HALDB Partition Definition utility.
- Chapter 12, "DXR (IRLM) Messages," on page 427, explains IMS Resource Lock Manager (IRLM) messages.
- Chapter 13, "ELX Messages," on page 455, explains Transport Manager Subsystem messages.
- Chapter 14, "Dynamic Allocation (IMSDALOC) Messages," on page 465, explains the messages associated with the DFSMDA macro that is used to create a parameter list in SDFSRESL for dynamically allocated databases.
- Chapter 15, "Database Description Generation (DBDGEN) Messages," on page 469, explains the messages for DBD generation error conditions.
- Chapter 16, "System Definition (G*nnn*) Messages," on page 499, explains the error messages associated with system definition.
- Chapter 17, "Program Specification Block Generation (PSBGEN) Messages," on page 545, explains the messages for PSB generation error conditions.

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- Appendix A, “IMS Problem Determination,” on page 553, defines the standard IMS problem determination actions to be taken for the diagnosis and resolution of program failures.
- Appendix B, “Return Codes and Function Codes,” on page 557, explains the various return codes associated with the messages.
- Appendix C, “IMS System Services Return Codes,” on page 571, describes the IMODULE and IMSAUTH return codes.
- Appendix D, “OM Command Return and Reason Codes,” on page 579 explains the return codes, reason codes, and completion codes for all IMS commands that are routed from the Operations Manager, which are listed in the DFSCMDRR macro.
- Appendix E, “DL/I Codes,” on page 585 explains DL/I return and reason codes, and DL/I status codes.
- Appendix F, “DBCTL Return Codes,” on page 649, describes the various return and reason codes associated with the Database Control Subsystem (DBCTL).
- Appendix G, “Transport Manager Interface Functions and Return Codes,” on page 657, describes the various return and reason codes associated with the Transport Manager Subsystem (TMS).

With IMS Version 9, you can reorganize HALDB partitions online, either by using the integrated HALDB Online Reorganization function or by using an external product. In this information, the term HALDB Online Reorganization refers to the integrated HALDB Online Reorganization function that is part of IMS Version 9, unless otherwise indicated.

IMS Version 9 provides an integrated IMS Connect function, which offers a functional replacement for the IMS Connect tool (program number 5655-K52). In this information, the term IMS Connect refers to the integrated IMS Connect function that is part of IMS Version 9, unless otherwise indicated.

For definitions of terminology used in this book and references to related information in other publications, see the *IMS Version 9: Master Index and Glossary*.

In the remainder of the book, IMS Version 9 will be called simply IMS.

Related Publications

You should be familiar with OS/390 or z/OS (depending on your installation), its system generation, and telecommunications, and the access methods used by IMS. Related publications are listed in “Bibliography” on page 669.

IBM Product Names Used in This Information

In this information, the licensed programs shown in Table 1 are referred to by their short names.

Table 1. Licensed Program Full Names and Short Names

Licensed program full name	Licensed program short name
IBM® Application Recovery Tool for IMS™ and DB2®	Application Recovery Tool
IBM CICS® Transaction Server for OS/390®	CICS
IBM CICS Transaction Server for z/OS®	CICS
IBM DB2 Universal Database™	DB2 Universal Database
IBM DB2 Universal Database for z/OS	DB2 UDB for z/OS
IBM Enterprise COBOL for z/OS and OS/390	Enterprise COBOL
IBM Enterprise PL/I for z/OS and OS/390	Enterprise PL/I
IBM High Level Assembler for MVS™ & VM & VSE	High Level Assembler
IBM IMS Advanced ACB Generator	IMS Advanced ACB Generator
IBM IMS Batch Backout Manager	IMS Batch Backout Manager

Table 1. Licensed Program Full Names and Short Names (continued)

Licensed program full name	Licensed program short name
IBM IMS Batch Terminal Simulator	IMS Batch Terminal Simulator
IBM IMS Buffer Pool Analyzer	IMS Buffer Pool Analyzer
IBM IMS Command Control Facility for z/OS	IMS Command Control Facility
IBM IMS Connect for z/OS	IMS Connect
IBM IMS Connector for Java™	IMS Connector for Java
IBM IMS Database Control Suite	IMS Database Control Suite
IBM IMS Database Recovery Facility for z/OS	IMS Database Recovery Facility
IBM IMS Database Repair Facility	IMS Database Repair Facility
IBM IMS DataPropagator™ for z/OS	IMS DataPropagator
IBM IMS DEDB Fast Recovery	IMS DEDB Fast Recovery
IBM IMS Extended Terminal Option Support	IMS ETO Support
IBM IMS Fast Path Basic Tools	IMS Fast Path Basic Tools
IBM IMS Fast Path Online Tools	IMS Fast Path Online Tools
IBM IMS Hardware Data Compression-Extended	IMS Hardware Data Compression-Extended
IBM IMS High Availability Large Database (HALDB) Conversion Aid for z/OS	IBM IMS HALDB Conversion Aid
IBM IMS High Performance Change Accumulation Utility for z/OS	IMS High Performance Change Accumulation Utility
IBM IMS High Performance Load for z/OS	IMS HP Load
IBM IMS High Performance Pointer Checker for OS/390	IMS HP Pointer Checker
IBM IMS High Performance Prefix Resolution for z/OS	IMS HP Prefix Resolution
IBM Tivoli® NetView® for z/OS	Tivoli NetView for z/OS
IBM WebSphere® Application Server for z/OS and OS/390	WebSphere Application Server for z/OS
IBM WebSphere MQ for z/OS	WebSphere MQ
IBM WebSphere Studio Application Developer Integration Edition	WebSphere Studio
IBM z/OS	z/OS

How to Send Your Comments

Your feedback is important in helping us provide the most accurate and highest quality information. If you have any comments about this or any other IMS information, you can do one of the following:

- Go to the IMS Library page at www.ibm.com/software/data/ims/library.html and click the Library Feedback link, where you can enter and submit comments.
- Send your comments by e-mail to imspubs@us.ibm.com. Be sure to include the title, the part number of the title, the version of IMS, and, if applicable, the specific location of the text you are commenting on (for example, a page number in the PDF or a heading in the Information Center).

Using LookAt to Look up Message Explanations

LookAt is an online facility that lets you look up explanations for most messages you encounter, as well as for some system abends and codes. Using LookAt to find information is faster than a conventional search because in most cases LookAt goes directly to the message explanation.

You can access LookAt from the Internet at: http://www.ibm.com/eserver/zseries/zos/bkserv/lookat/ or from anywhere in z/OS where you can access a TSO/E command line (for example, TSO/E prompt, ISPF, z/OS UNIX System Services running OMVS).

The LookAt Web site also features a mobile edition of LookAt for devices such as Pocket PCs, Palm OS, or Linux-based handhelds. So, if you have a handheld device with wireless access and an Internet browser, you can now access LookAt message information from almost anywhere.

To use LookAt as a TSO/E command, you must have LookAt installed on your host system. You can obtain the LookAt code for TSO/E from a disk on your z/OS Collection or from the LookAt Web site's Download section.

Summary of Changes

Changes to This Book for IMS Version 9

This book contains new messages and codes for the following features:

- IMS Availability Enhancements
- DBRC Migration Coexistence
- Database Recovery Facility Command Support
- ETO Feature Checking
- Greater than 255 Transaction Classes
- Fast Path Area Open/Close (Parallel Open) Enhancements
- Fast Path Multiple Areas Shared VSO Structures
- FP Serviceability/Usability
- HALDB Online Reorganization Support
- MNPS Replacement of XRF Uservar
- Optional EMHQ Structure for Shared Queues
- OTMA Serviceability and Usability Enhancements
- RACF Enhancements to Replace SMU
- Reducing Abends
- IMS Enhanced Command Environment
- DBRC Enhancements
- /DIAGNOSE Command for Serviceability
- HALDB Specific Partition Initialization
- IMSplex Database Commands
- IVP Enhancements
- Syntax Checker Enhancements

A new appendix named “Type-1 and Type-2 Command Equivalents” has been added to *IMS Version 9: Messages and Codes, Volume 2* to document the type-2 commands and their equivalent type-1 commands.

CQS Control List entries have been added in Appendix H, “CQS Control List Entries,” on page 663.

DLIModel utility messages have been added in Chapter 10, “DLIModel Utility Messages,” on page 295.

IMS Connect messages have been added in Chapter 7, “IMS Connect Messages,” on page 183.

For detailed information about technical enhancements for IMS Version 9, see the *IMS Version 9: Release Planning Guide.*

Library Changes for IMS Version 9

Changes to the IMS Library for IMS Version 9 include the addition of one title, a change of one title, organizational changes, and a major terminology change. Changes are indicated by a vertical bar (|) to the left of the changed text.

The IMS Version 9 information is now available in the DB2 Information Management Software Information Center for z/OS Solutions, which is available at http://publib.boulder.ibm.com/infocenter/dzichelp. The DB2 Information Management Software Information Center for z/OS Solutions provides a graphical user

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interface for centralized access to the product information for IMS, IMS Tools, DB2 Universal Database (UDB) for z/OS, DB2 Tools, and DB2 Query Management Facility (QMF™).

New and Revised Titles

The following list details the major changes to the IMS Version 9 library:

- *IMS Version 9: IMS Connect Guide and Reference*

  The library includes new information: *IMS Version 9: IMS Connect Guide and Reference*. This information is available in softcopy format only, as part of the DB2 Information Management Software Information Center for z/OS Solutions, and in PDF and BookManager® formats.

  IMS Version 9 provides an integrated IMS Connect function, which offers a functional replacement for the IMS Connect tool (program number 5655-K52). In this information, the term *IMS Connect* refers to the integrated IMS Connect function that is part of IMS Version 9, unless otherwise indicated.
- The information formerly titled *IMS Version 8: IMS Java User's Guide* is now titled *IMS Version 9: IMS Java Guide and Reference*. This information is available in softcopy format only, as part of the DB2 Information Management Software Information Center for z/OS Solutions, and in PDF and BookManager formats.
- To complement the IMS Version 9 library, a new book, *An Introduction to IMS* by Dean H. Meltz, Rick Long, Mark Harrington, Robert Hain, and Geoff Nicholls (ISBN # 0-13-185671-5), is available starting February 2005 from IBM Press. Go to the IMS Web site at www.ibm.com/ims for details.

Organizational Changes

Organization changes to the IMS Version 9 library include changes to:

- *IMS Version 9: IMS Java Guide and Reference*
- *IMS Version 9: Messages and Codes, Volume 1*
- *IMS Version 9: Utilities Reference: System*

The chapter titled ″DLIModel Utility″ has moved from *IMS Version 9: IMS Java Guide and Reference* to *IMS Version 9: Utilities Reference: System*.

The DLIModel utility messages that were in *IMS Version 9: IMS Java Guide and Reference* have moved to *IMS Version 9: Messages and Codes, Volume 1*.

Terminology Changes

IMS Version 9 introduces new terminology for IMS commands:

type-1 command
: A command, generally preceded by a leading slash character, that can be entered from any valid IMS command source. In IMS Version 8, these commands were called *classic* commands.

type-2 command
: A command that is entered only through the OM API. Type-2 commands are more flexible than type-2 commands and can have a broader scope. In IMS Version 8, these commands were called *IMSplex* commands or *enhanced* commands.

Accessibility Enhancements

Accessibility features help a user who has a physical disability, such as restricted mobility or limited vision, to use software products. The major accessibility features in z/OS products, including IMS, enable users to:

- Use assistive technologies such as screen readers and screen magnifier software
- Operate specific or equivalent features using only the keyboard
- Customize display attributes such as color, contrast, and font size

User Assistive Technologies

Assistive technology products, such as screen readers, function with the IMS user interfaces. Consult the documentation of the assistive technology products for specific information when you use assistive technology to access these interfaces.

Accessible Information

Online information for IMS Version 9 is available in BookManager format, which is an accessible format. All BookManager functions can be accessed by using a keyboard or keyboard shortcut keys. BookManager also allows you to use screen readers and other assistive technologies. The BookManager READ/MVS product is included with the z/OS base product, and the BookManager Softcopy Reader (for workstations) is available on the IMS Licensed Product Kit (CD), which you can download from the Web at www.ibm.com.

Keyboard Navigation of the User Interface

Users can access IMS user interfaces using TSO/E or ISPF. Refer to the *z/OS V1R1.0 TSO/E Primer*, the *z/OS V1R5.0 TSO/E User's Guide*, and the *z/OS V1R5.0 ISPF User's Guide, Volume 1*. 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.

New, Changed, and Deleted Messages and Abends

This section lists new, changed, and deleted messages and codes for IMS Version 9. It does not include messages or codes that were added or modified as a result of technical changes to previous IMS releases.

The list is current as of the creation of this information.

In this section:

- "New Messages and Abends"
- "Changed Messages and Abends" on page xxii
- "Deleted Messages and Abends" on page xxiv

New Messages and Abends

The user abend codes listed in Table 2 were added to IMS Version 9.

Table 2. New User Abends for IMS Version 9

0369
3476
3477

The BPE messages that were added to IMS Version 9 are listed in Table 3.

Table 3. New BPE Messages for IMS Version 9

BPE0042E

The CSL messages that were added to IMS Version 9 are listed in Table 4 (read top-to-bottom left-to-right).

Table 4. New CSL Messages for IMS Version 9

CSL3116E	CSLN105E	CSLN110I	CSLN113E
CSL3117E	CSLN107I	CSLN111I	CSLN114I
CSL3119E	CSLN108I	CSLN112E	CSLN115E
CSLM080I	CSLN109I		

The DFS messages that were added to IMS Version 9 are listed in Table 5 on page xxii (read top-to-bottom left-to-right).

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Table 5. New DFS Messages for IMS Version 9

DFSI938I	DFS672I	DFS2852I	DFS3674W
DFSI939I	DFS0725I	DFS2853A	DFS3675I
DFSI998I	DFS0796I	DFS2856W	DFS3689W
DFSI999I	DFS1946W	DFS2857E	DFS3715I
DFSIX090	DFS1987I	DFS2858E	DFS3719I
DFSIX091	DFS2002I	DFS2859I	DFS4273I*
DFSIX092	DFS2166	DFS2970I	DFS4301E
DFSIX093	DFS2224I	DFS2971W	DFS4302E
DFSIX094	DFS2262	DFS2972E	DFS4303E
DFSIX095	DFS2263I	DFS2973W	DFS4304E
DFSIX096	DFS2265I	DFS2974I	DFS4306E
DFSIX097	DFS2266I	DFS2990E	DFS4307E
DFSIX098	DFS2267I	DFS2991E	DFS4308E
DFSIX100	DFS2268I	DFS2992E	DFS4309E
DFSIX101	DFS2269I	DFS2993E	DFS4310E
DFSIX102	DFS2285I	DFS2994E	DFS4311E
DFSIX103	DFS2286I	DFS2995E	DFS4312E
DFSIX104	DFS2287I	DFS2996E	DFS4313E
DFSIX105	DFS2299A	DFS2997E	DFS4314E
DFSIX106	DFS2383E	DFS2998E	DFS4315E
DFS0015I	DFS2645I	DFS3486	
DFS135	DFS2732E		
DFS0300I	DFS2851I		
DFS0548E			
DFS671I			
DFS0671W			

The DSP messages that were added to IMS Version 9 are listed in Table 6 (read top-to-bottom left-to-right).

Table 6. New DSP Messages for IMS Version 9

DSP0197I	DSP0832I	DSP2852I	DSPM137W
DSP0198I	DSP0833I	DSPM130W	DSPM138I
DSP0199I	DSP1018I	DSPM131W	DSPM139I
DSP0292I	DSP1077I	DSPM132W	DSPM140I
DSP0293I	DSP1078I	DSPM133W	DSPM141W
DSP0295I	DSP1079I	DSPM134W	DSPM142I
DSP0830I	DSP1080I	DSPM135W	DSPM143I
DSP0831I	DSP1103I	DSPM136W	
	DSP2851I		

The HWS messages that were added to IMS Version 9 are listed in Chapter 7, “IMS Connect Messages,” on page 183.

The DHB messages that were added to IMS Version 9 are listed in Chapter 10, “DLIModel Utility Messages,” on page 295.

Changed Messages and Abends

The following messages and codes (read top-to-bottom left-to-right) were changed for IMS Version 9. An asterisk (*) indicates that the message text was changed.

The IMS user abends that were changed for IMS Version 9 are listed in Table 7 on page xxiii (read top-to-bottom left-to-right).

Table 7. IMS User Abends Changed for IMS Version 9

0107	0437	2801	3049
0166			

The AREA, BPE, and CQS messages that were changed for IMS Version 9 are listed in Table 8 (read top-to-bottom left-to-right).

Table 8. AREA, BPE, and CQS Messages Changed for IMS Version 9

BPE0003E	CQS0263E

The CSL messages that were changed for IMS Version 9 are listed in Table 9 (read from top-to-bottom, left-to-right).

Table 9. CSL Messages Changed for IMS Version 9

CSL3011W
CSL3111E

The DFS messages that were changed for IMS Version 9 are listed in Table 10 (read top-to-bottom left-to-right).

Table 10. DFS Messages Changed for IMS Version 9

DFS030I	DFS2574I	DFS2930I	DFS4261I
DFS047A	DFS2634I	DFS3144A	DFS4262I
DFS168I*	DFS2635I	DFS3306	DFS4266I
DFS391I	DFS2636I	DFS3430I	DFS4270I
DFS0415W	DFS2637I	DFS3498W	DFS4279I
DFS0463	DFS2649I	DFS3649A	*DFS4285I
DFS488I	DFS2844E	*DFS3676I	
DFS621W	DFS2854	*DFS3702I	
DFS627W		DFS3824	
DFS686W		DFS4045A	
DFS0832I		DFS4172E	
DFS0841I		*DFS4260I	
DFS1982I*			
DFS2027I			
DFS2397E			
DFS2449I			
DFS2466W			

The DSP messages that were changed for IMS Version 9 are listed in Table 11 (read top-to-bottom left-to-right).

Table 11. DSP, DXR, and G Messages Changed for IMS Version 9

DSP0309I	G002	*G170	*G1209
DSP0141I	G011		*G1210
DSP0144I	G112		G1211
*DSP0175I			
DSP0204I			
*DSP0230I			
DSP0271I			
*DSP1157A			

The HWS messages that were changed for IMS Version 9 are listed in Chapter 7, “IMS Connect Messages,” on page 183.

The DHB messages that were changed for IMS Version 9 are listed in Chapter 10, “DLIModel Utility Messages,” on page 295.

Deleted Messages and Abends

The IMS user abends that were deleted from IMS Version 9 are listed in Table 12 (read top-to-bottom left-to-right).

Table 12. IMS User Abends Deleted for IMS Version 9

3309

The messages that were deleted from IMS Version 9 are listed in Table 13 (read top-to-bottom left-to-right).

Table 13. Messages Deleted for IMS Version 9

DFS3309A	DFS4265I	DFS4269I	DFS4281I
DFS4184E	DFS4266I	DFS4274I	DFS4282I
DFS4232I	DFS4267I	DFS4275I	DFS4284I
DFS4263I	DFS4268I	DFS4276I	DFS4289
DFS4264I			

Chapter 1. BPE Codes

This section contains:

- "Introduction to Abend Codes"
- "BPE User Abend Codes"
- "BPE Service Return Codes" on page 3

Introduction to Abend Codes

Most IMS user abend codes are explained in more detail in *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*. This manual tells how to determine the cause of an abend, and how to find the location in the program code from which the abend was issued.

For each abend code, the following information is provided when applicable:

Explanation: what the abend means; why it occurred; what caused it; what its variable entry fields are.

System Action: what is happening as a result of the condition that caused the abend; whether the system is waiting for responses.

Programmer Response, **Operator Response, or both:** if a response is necessary, who performs it; what the pertinent responses are, and their effect on the system or program.

Problem Determination: if the problem recurs or is persistent to the extent that system efficiency suffers, what actions and sources of information can be used to diagnose the problem. If this information is not given, it does not apply.

For IMS abends, the Problem Determination usually includes one or more numbers (for example, 4, 6). These numbers are cross-references to a numbered list of problem determination items in Appendix A, "IMS Problem Determination," on page 553. This section defines what specific actions and source data are required to solve a given problem.

BPE User Abend Codes

This topic identifies and explains user abend codes issued by Base Primitive Environment (BPE).

3400

Explanation: An error during early BPE initialization prevented BPE services from starting. Register 15 at the time of abend contains a subcode that can be used to determine the reason for the abend. Subcodes are:

Subcode	Explanation
X'01'	BPEINIT0 could not establish an ESTAE recovery routine.
X'02'	BPE stack storage services initialization failed.
X'03'	A request to obtain a stack block for early BPE initialization failed.
X'04'	A lower-level service initialization module could not be loaded.
X'05'	A lower-level service initialization module could not complete the initialization of its service.
X'06'	An error occurred while parsing the BPE configuration PROCLIB member specified on the BPECFG= parameter in the z/OS startup parameters.
X'07'	The IMS component using BPE services (for example, CQS, OM, RM, or SCI) detected a problem during its early initialization and indicated to BPE that it should abend.
X'08'	An error occurred creating a z/OS name or token for the IMS component address space.
X'09'	A mismatch occurred between the BPE version used by the IMS component (for example, CQS, OM, RM, or SCI) and the version of the BPE modules.

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X'0A' The BPE SVC routine (BPESVC00) could not be installed.

X'0B' The BPE resource manager (BPERSM00) could not be established.

System Action: The address space is abnormally terminated.

System Operator Response: Take the appropriate action based on the subcode you received.

For subcodes X'01' through X'05' and X'07' through X'0B', the problem is one of the following:

- An environmental error, such as missing modules in IMS.SDFSRESL or a storage shortage in the address space.
- An internal error within BPE or the component using BPE.

Messages that further explain the reason for the error might precede this abend. Refer to the job log output from the failed job for explanatory messages.

If you cannot determine and correct an environmental cause for the problem, save any dump and SYSLOG information, and contact the IBM Support Center.

For subcode X'06': Although this abend can result from internal or environmental errors, its most probable cause is a problem with the BPE configuration PROCLIB member. If BPE cannot find or read the member, abend U3400 follows message BPE0002E, which indicates the problem. Correct the problem and restart the IMS component address space.

If there is an error parsing the member, this abend follows message BPE0003E, which indicates where in the member the error occurred. Correct the configuration member and restart the IMS component address space.

For subcode X'09': This abend occurs when the IMS component modules (for example, CQS modules beginning with CQS and BPE modules beginning with BPE) in your STEPLIB data sets are at different versions. This abend follows message BPE0013E, which indicates the different levels of the BPE modules. Ensure that you are running the correct level of BPE modules.

Module: BPEINIT0

3401

Explanation: An error during the initialization of a new TCB in the IMS component address space prevented the TCB from starting. Register 15 at the time of abend contains a subcode that can be used to determine the reason for the abend. Subcodes are:

Subcode
Explanation

X'01' BPESYIN0 could not establish an ESTAE recovery routine.

X'02' A request to obtain a stack block for the TCB initialization failed.

X'03' BPE could not initialize the BPE internal dispatcher for the new TCB.

X'04' A lower-level TCB initialization module could not complete initialization because of an error or unexpected condition.

X'05' BPE could not create an internal server that runs under the new TCB.

X'06' BPE could not load a lower-level TCB initialization module, and therefore could not complete the initialization of the new TCBs environment.

System Action: If the TCB being created is not a required TCB, the IMS component address space continues to function; otherwise, the IMS component address space is abnormally terminated.

System Operator Response: The problem is one of the following:

- An internal error within BPE.
- An environmental error, such as missing modules in IMS.SDFSRESL, or a storage shortage in the address space

Messages that further explain the reason for the error might precede this abend. Refer to the job log output from the failed job for explanatory messages.

If you cannot determine and correct an environmental cause for the problem, save any dump and SYSLOG information, and contact the IBM Support Center.

Module: BPESYIN0

3402

Explanation: An error occurred during the termination of a TCB in the IMS component address space. Register 15 at the time of abend contains a subcode that can be used to determine the reason for the abend. Subcodes are:

Subcode
Explanation

X'01' A routine involved in the cleanup process for the terminating TCB encountered an error that prevented the cleanup from completing.

X'02' A routine involved in the cleanup process for the IMS component address space encountered an error that prevented the cleanup from completing.

X'03' BPE could not start required processes to terminate subtask TCBs under the TCB that was terminating.

System Action: If the TCB being terminated is not a required TCB, the IMS component address space continues to function. If the TCB is required, or if the IMS component address space is in the process of being shut down, the IMS component address space is abnormally terminated.

System Operator Response: The problem is one of the following:

- An internal error within BPE.
- An environmental error, such as missing modules in IMS.SDFSRESL or a storage shortage in the address space

Messages that further explain the reason for the error might precede this abend. Refer to the job log output from the failed job for explanatory messages.

If you cannot determine and correct an environmental cause for the problem, save any dump and SYSLOG information, and contact the IBM Support Center.

Module: BPESYTR0

3403

Explanation: The BPE address space startup module BPEINI00 encountered an error that prevented a BPE address space from starting.

User abend 3403 is a standard abend issued by module BPEINI00 when it encounters a problem trying to start an IMS component address space using BPE services. At the time of the abend, register 15 contains a subcode that indicates the reason for the abend. Register 2 contains the address of the z/OS parameters passed to BPEINI00. Abend 3403 is preceded by message BPE0037E, which further explains the problem.

The following list contains the Register 15 subcodes:

Subcode	Explanation
X'01'	The address space being started is not APF-authorized. All BPE and IMS component modules must be in data sets that are APF-authorized. In addition, module BPEINI00 must be link-edited with authorization code 1: SETCODE AC(1)
X'02'	BPEINI00 was given control in a key other than 7. BPE must run in key 7. Ensure that BPEINI00 is correctly added to the z/OS PPT (program properties table).
X'03'	Either BPEINI00 could not find the BPEINIT= keyword on the z/OS JCL startup parameters (PARM=), or the specified module name was missing or not valid. The BPEINIT= parameter is required. The parameter defines the name of the BPE startup parameter module to BPEINI00, which defines the type of IMS component address space to start.
X'04'	The module specified by the BPEINIT= keyword on the z/OS JCL startup parameters (PARM=) could not be loaded.
X'05'	The module specified by the BPEINIT= keyword on the z/OS JCL startup parameters (PARM=) was loaded into key 0 storage. This situation probably occurred due to being link-edited as reentrant. This module must be link-edited as non-reentrant.
X'06'	BPEINI00 could not find a valid startup parameter data area (UCDB block) in the module specified by the BPEINIT= keyword on the z/OS JCL startup parameters.
X'07'	BPEINI00 could not get storage for a copy of the z/OS input parameters.

System Action: The address space terminates abnormally.

System Operator Response: If the error indicated by the subcode is due to environmental conditions (for example, incorrect authorization or invalid parameters), correct the indicated problem and restart the address space. Otherwise, save any joblog and syslog information and contact the IBM Support Center for assistance.

Module: BPEINI00

4095

Explanation: BPE issues this abend once for each TCB in the address space when an unrecoverable abend occurs and it is necessary to abnormally terminate the address space.

System Action: The IMS component address space is abnormally terminated.

System Operator Response: BPE issues this abend after one of the address space's TCBs has an unrecoverable abend. It is used to abnormally terminate the remaining TCBs; it is not itself part of the original problem. Examine the job log output for the first TCB to abend with a code other than 4095 in order to determine the cause of the subsequent 4095 abends.

BPE Service Return Codes

This topic describes common BPE service return codes.

BPEATTCH

Description: Attach a TCB.

Return Code	Explanation
X'00000004'	The TCB index passed to BPEATTCH was not a valid index.
X'00000008'	There is no TCB type of the requested type defined to BPE.
X'0000000C'	A new TCB of the indicated type could not be attached because there were no available entries for it in the BPE TCB table. The maximum number of TCBs of this type is already attached.
X'00000010'	The z/OS ATTACH for the new TCB failed.
X'00000014'	The caller is a non-thread running under the parent TCB of the TCB that was requested to be attached. This is not a valid environment for the BPEATTCH call.
X'00000020'	Internal processing error: The enqueue of an AWE to the TCB attach processor for the requested TCB type failed.
X'00000024'	Internal processing error: The BPEWAIT for a response from the TCB attach processor for the requested TCB failed.
X'00000028'	Internal processing error: The routine called by BPEATTCH enqueued an AWE to the TCB attach processor for the requested TCB; however, the DDB address it saved in the AWE was invalid, and the attach processor rejected the attach request.
X'0000002C'	Internal processing error: The routine called by BPEATTCH enqueued an AWE to the TCB attach processor for the requested TCB; however, the TCB attach processor rejected the AWE because it contained an invalid function code.
X'00000030'	Internal processing error: BPEATTCH was unable to obtain a DQCB (Dispatcher Queue Control Block) for the new TCB -- the BPECBGET call for the DQCB failed.
X'000000F8'	The requested function is not present in the BPE system at execution time. This is likely due to a macro/module mismatch.
X'000000FC'	The parameter list version generated by the macro is not supported by the called service routine. This is likely due to a macro/module mismatch.

BPEAWSRV

Description:

Return Code	Explanation
X'00000004'	The CREATE request for an AWE server was successful for at least one, but not all, of the requested AWE servers.
X'00000008'	Unable to create a thread for an AWE server. The Thread CREATE service, BPETHDCR, failed.
X'0000000C'	Unable to obtain an AQCB block for an AWE server being created.
X'00000010'	The BPE TCB token, that passed the TCBTKN parameter for an AWE server CREATE request, was not a valid token.
X'00000020'	AQHE passed to create routine was not a valid AQHE. This is likely an internal processing error.
X'00000024'	BPEAWSRV could not determine the TCB under which it should create the server. The TCB is determined by the value of TCBTKN on this macro, or by the value of the TCBTYPE on the BPEAWDEF macro when the queue server is defined. If neither of these parameters are coded, then the server create function does not know under what TCB to create the server thread.
X'00000028'	If AWEIDX was specified, the value passed was not a valid AWE server index. If TYPE was specified, the type indicated was not a valid AWE server type according to the AWE server definition module. For BPE AWE servers, macro BPEAWIX and module BPEAQHT0 are probably out of sync. For user-product AWE servers, the user-product type definition macro and module are probably out of sync.
X'0000002C'	The NUMTHDS parameter specified an invalid number of threads. It must specify a number from 1 to 255.
X'000000F8'	The requested function is not present in the BPE system at execution time. This is likely due to a macro/module mismatch.
X'000000FC'	The parameter list version generated by the macro is not supported by the called service routine. This is likely due to a macro/module mismatch.

BPEBPCRE

Description: Create a buffer pool.

Return Code	Explanation
X'00000004'	The value specified on the INCREMENT parameter was zero or negative.
X'00000008'	The value specified on the MINBUF parameter was zero or negative.
X'0000000C'	The value specified on the MAXBUF parameter was less than the MINBUF value.
X'00000010'	The value specified on the PRIMARY parameter was negative.
X'00000014'	The value specified on the UPPERLIMIT parameter was less than the PRIMARY or MAXIMUM values.
X'00000018'	The subpool specified on SP was invalid or not supported.
X'0000001C'	The buffer format specified on the FORMAT parameter is not a valid format for the current version of the buffer create service.
X'00000020'	Either the pointer to the 4-character buffer pool type string was zero, or the string was all blanks or all nulls.
X'00000024'	A buffer pool of the type specified on the TYPE parameter has already been created. The token of the already-existing pool is returned in the location indicated by the TOKEN parameter.
X'00000040'	A BPEGETM call failed for control block storage for the new buffer pool.
X'00000044'	A BPEGETM call failed for the primary allocation of buffer storage.
X'00000048'	BPELOAD failed for one or more of the BPE buffer manager service modules for the requested pool format.
X'0000004C'	A BPELAGET call failed when trying to get the buffer pool create/destroy latch.
X'00000050'	An abend occurred in buffer pool create processing. The buffer pool was not created.
X'000000F8'	The requested function is not present in the BPE system at execution time. This is likely due to a macro/module mismatch.
X'000000FC'	The parameter list version generated by the macro is not supported by the called service routine. This is likely due to a macro/module mismatch.

BPEBPGET

Description: Get a buffer from a buffer pool.

Return Code	Explanation
X'00000004'	No buffer could be obtained because the pool is at its upper limit.
X'00000008'	No buffer could be obtained because a BPEGETM call for buffer storage failed.
X'00000020'	The value specified on the SIZE parameter was zero or negative.
X'00000024'	The value specified on the PREFIX was not between 0 and 256.
X'00000028'	A nonzero value was specified on the PREFIX parameter, but the buffer pool was not created with FORMAT=PREFIX.
X'0000002C'	The address of the word to receive the returned buffer address (BUFFERPTR) was not valid (it was in the first 4K of storage).
X'00000030'	The token passed to BPEBPGET was not a valid token for any BPE-managed buffer pool.
X'00000034'	A page-fixed buffer with a length greater than 100 pages was requested. BPEBPGET limits page-fixed buffers to 100 pages (409,600 bytes) or fewer.
X'000000F8'	The requested function is not present in the BPE system at execution time. This is likely due to a macro/module mismatch.
X'000000FC'	The parameter list version generated by the macro is not supported by the called service routine. This is likely due to a macro/module mismatch.

BPECBGET

Description: Get a control block.

Return Code	Explanation
X'00000004'	A bad CBTE address was passed to the CB get routine. The get routine validates that the CBTE address it is passed has the character string ″CBTE″ as the first word of the block. If it does not, this return code is

passed back to the caller. This is likely an internal systems error of some kind.

X'00000008' Storage was unavailable to satisfy the request.

X'000000F8' The requested function is not present in the BPE system at execution time. This is likely due to a macro/module mismatch.

X'000000FC' The parameter list version generated by the macro is not supported by the called service routine. This is likely due to a macro/module mismatch.

BPECMSRV

Description: Submit a command for processing.

Return Code	Explanation
X'00000020'	The command was rejected by the command action routine and was not processed.
X'00000024'	The command failed.
X'00000028'	Unknown command.
X'0000002C'	Missing command verb.
X'00000040'	Bad command pointer. The address of the command passed to BPECMSRV was zero.
X'00000044'	Bad command length. The length of the command passed to BPECMSRV was zero.
X'00000048'	Bad BPEWPRNT exit parameter list length. The length of an exit parameter list passed to BPECMSRV was zero or negative.
X'0000004C'	The BPECMSRV caller was not running as a BPE thread.
X'00000060'	BPE was unable to get the necessary working storage to process the command.
X'00000064'	BPE was unable to create a new thread to process the command.
X'00000068'	BPE could not process the command because a BPEPOST call to start the command processing thread failed.
X'0000006C'	BPE could not process the command because a BPELAGET call for a latch to serialize the command failed.
X'00000070'	The command action module that processed the command returned an undefined return code to BPE. The result of the command processing is not known.
X'000000F8'	The requested function is not present in the BPE system at execution time. This is likely due to a macro to module mismatch.
X'000000FC'	The parameter list version generated by the macro is not supported by the called service routine. This is likely due to a macro to module mismatch.

BPEGETM

Description: GETMAIN storage.

Return Code	Explanation
X'00000004'	An invalid or unsupported subpool was specified.
X'00000008'	A zero (or negative) length was requested.
X'0000000C'	Unable to obtain the requested storage (MVS GETMAIN failed).
X'000000F8'	The requested function is not present in the BPE system at execution time. This is likely due to a macro/module mismatch.
X'000000FC'	The parameter list version generated by the macro is not supported by the called service routine. This is likely due to a macro/module mismatch.

BPELAGET

Description: Get a latch.

Return Code	Explanation
X'00000004'	The latch was not obtained because it was owned in exclusive mode by another caller (WAIT=NO only).
X'00000008'	The latch was not obtained because it was owned in shared mode by one or more callers (WAIT=NO only).
X'0000000C'	A request for a latch in shared mode was not granted because there was a waiter for the latch in exclusive mode (WAIT=NO only).
X'00000010'	The latch was successfully obtained in exclusive mode, and was transferred from another thread to the current thread.
X'00000020'	The latch was not obtained because the caller already owns the latch in exclusive mode.
X'00000024'	The latch was not obtained because the latch services module was unable to WAIT the caller. This is usually due to an error in the caller's environment:

	either the caller is not in TCB mode, or the caller's ECB is already WAITing.
X'00000028'	A request was not granted for a latch in shared mode because the latch had been transferred to the caller's ECB by another thread; for this reason the request must be in exclusive mode.
X'000000F8'	The requested function is not present in the BPE system at execution time. This is likely due to a macro/module mismatch.
X'000000FC'	The parameter list version generated by the macro is not supported by the called service routine. This is likely due to a macro/module mismatch.

BPELAREL

Description: Get a control block.

Return Code	Explanation
X'00000004'	The latch was not released because it is owned in exclusive mode by the caller.
X'00000008'	The latch was not released because it is owned in exclusive mode by another caller.
X'0000000C'	The latch was not released because it is owned in shared mode by one or more other callers.
X'00000010'	The latch was not released because it is not owned.
X'00000014'	The latch was not transferred because the ECB, to which the latch was to be transferred, was waiting to get the latch in shared mode.
X'00000018'	The latch was released (MODE=EX), but a protocol error may have occurred. The latch had been transferred to the caller's ECB from a different ECB, but the caller had never accepted the latch.
X'000000F8'	The requested function is not present in the BPE system at execution time. This is likely due to a macro or module mismatch.
X'000000FC'	The parameter list version generated by the macro is not supported by the called service routine. This is likely due to a macro or module mismatch.

BPELOAD

Description: Load a module.

Return Code	Explanation
X'00000004'	For a list-form load (MODLIST), at least one of the modules in the list had an error.
X'0000000C'	Specified module was not found.
X'00000010'	BLDL for module failed. This error is most likely due to an internal error with BLDL, such as an out-of-storage condition.
X'00000014'	Load of module failed. The module was found in the library, but LOAD returned a nonzero return code.
X'00000028'	TCB=JSTP required an AWE to be queued to JSTP TCB for LOAD processing, and the AWE enqueue failed.
X'00000030'	Internal failure in load processing.
X'000000F8'	The requested function is not present in the BPE system at execution time. This is likely due to a macro/module mismatch.
X'000000FC'	The parameter list version generated by the macro is not supported by the called service routine. This is likely due to a macro/module mismatch.

BPELOADC

Description: Load/call/delete a module.

Return Code	Explanation
X'00000004'	The LOAD and call of the module were successful, but the subsequent DELETE of the module failed. The return code that the module passed back in register 15 is in the word or register specified by MODRC.
X'00000008'	The module specified on EP or EPLOC could not be loaded. The contents of the word or register specified by MODRC is undefined.
X'000000F8'	The requested function is not present in the BPE system at execution time. This is likely due to a macro/module mismatch.
X'000000FC'	The parameter list version generated by the macro is not supported by the called service routine. This is likely due to a macro/module mismatch.

BPEPARSE

Description: Parse data.

Return Code	Explanation
X'00000004'	The parser definition grammar passed on PADEF was not a valid BPEPADEF grammar.
X'00000008'	The control block storage passed on CBSTG was not big enough to contain the control blocks that needed to be built to contain the parsed input data. Issue BPEPARSE again with a larger amount of CBSTG storage. Note that the data in the CBSTG area is incomplete, and should not be used.
X'0000000C'	The CBSTG address passed to the parsing service was zero.
X'00000010'	The input data address passed to the parsing service was zero.
X'00000014'	An internal error occurred in the parsing service.
X'00000040'	An invalid keyword was detected in the input data.
X'00000044'	An unknown positional parameter was encountered in the input.
X'00000048'	A keyword parameter was specified with only an equal sign (KEYWORD=value), but the keyword was defined as having a sublist of values. Sublists can only be specified in parenthesis. An equal sign can only be used by itself (i.e., with no parentheses) if a keyword has a single value.
X'0000004C'	The input ended before all of a sublist or keyword had been parsed.
X'00000050'	A keyword was encountered (KEYWORD or KEYWORD=) when a value was expected.
X'00000054'	An input number being parsed was out of the range allowed for its output field length. For decimal numbers, the numbers must be less than or equal to 255, 65535, 16777215, and 2147483647 for 1, 2, 3, and 4 byte fields, respectively. For hexadecimal numbers, the number may not have digits more than 2 times the number of bytes in the output field.
X'00000058'	A parameter value defined as decimal contained non-decimal digits.
X'0000005C'	A parameter value defined as hexadecimal contained non-hexadecimal digits.
X'00000060'	A parameter value defined as a key value parameter had an unknown key value.
X'00000064'	A keyword parameter was seen multiple times and was not defined as being repeatable (REPEAT=YES on BPEPADEF).
X'00000068'	A parameter defined with REQUIRED=YES on BPEPADEF was not found in the input data (omitted).
X'0000006C'	A character parameter value was longer than the defined output field length, and the parameter definition did not specify TRUNC=YES on BPEPADEF to allow truncation.
X'00000070'	A keyword was coded specifying a null value. A non-null value is required.
X'000000F8'	The requested function is not present in the BPE system at execution time. This is likely due to a macro/module mismatch.
X'000000FC'	The parameter list version generated by the macro is not supported by the called service routine. This is likely due to a macro/module mismatch.

BPERDPDS

Description: Read a PDS member.

Return Code	Explanation
X'00000004'	The member name address passed to the read PDS routine was 0.
X'00000008'	The output buffer pointer address passed to the read PDS routine was 0.
X'0000000C'	The output buffer length word address passed to the read PDS routine was 0.
X'00000010'	The value specified on the RIGHTMAR parameter was either negative or not less than the actual LRECL of the data set.
X'00000040'	OPEN failed for the PDS.
X'00000044'	The PDS specified was not in fixed format.
X'00000048'	The member specified on the MEMBER parameter was not in the PDS.

X'0000004C'	A BSAM READ for the specified member failed.
X'00000050'	Unable to obtain storage for a buffer to hold the PDS data.
X'00000054'	The data set specified had an unsupported RECFM (for example, RECFM=U or RECFM=VBS).
X'000000F8'	The requested function is not present in the BPE system at execution time. This is likely due to a macro/module mismatch.
X'000000FC'	The parameter list version generated by the macro is not supported by the called service routine. This is likely due to a macro/module mismatch.

BPESVC

Description:

Return Code	Explanation
X'00000004'	The BPE SVC routine was unable to GETMAIN storage for an internal work area. R0 = return code from GETMAIN.
X'00000008'	The BPE SVC routine could not establish a recovery environment using the MVS ESTAE macro. R0 = return code from ESTAE.
X'0000000C'	The BPE SVC routine could not locate its main control block (the BPESVCA block). This is likely due to errors initializing the BPE SVC routine or other BPE system services.
X'00000010'	An invalid SVC function code was passed to the BPE SVC routine in register 0. R0 contains the invalid function code.
X'00000014'	The BPE SVC function requested requires the caller to be authorized (supervisor state and key 0-7), and the caller was not authorized.
X'00000018'	An abend occurred in the BPE SVC module BPESVC00. R0 contains the abend code.
X'0000001C'	The address for the name of the named function was zero (REGISTER, DEREGISTER, CALL).
X'00000020'	The BPE SVC module was unable to get a SYSTEM level ENQ on the resource SYSZBPE SVCNFHTB, which is required in order to serialize the named function hash table. R0 = the return code from the ENQ macro.
X'00000024'	The named function indicated could not be found (QUERY, REGISTER, DEREGISTER, CALL).
X'00000040'	The PSW (program status word) key indicated for the named function being registered was not in the range 0-7. Named function routines must run in a system key (REGISTER).
X'00000044'	The BPE SVC routine could not obtain storage for an SVC Function Block (SVCF) for the function being registered. R0 = return code from GETMAIN (REGISTER).
X'00000048'	The named function being registered is already registered and the REPLACE parameter did not allow it to be replaced (REGISTER).
X'00000060'	The named function that was requested to be called requires the caller to be authorized (supervisor state, key 0-7), and the caller was not authorized (CALL).
X'00000064'	The BPE SVC routine could not obtain work area storage for the named function routine to be called. R0 = return code from GETMAIN (CALL).
X'00000080'	The STOKEN address passed to the EOMCLEANUP function was zero (EOMCLEANUP).
X'000000FC'	The parameter list version generated by the macro is not supported by the called service routine. This is likely due to a macro/module mismatch.

BPESVCI0

Description: Initialize the BPE SVC module.

Return Code	Explanation
X'00000004'	Unable to load INIT routine BPESVCI0 to initialize the BPE SVC.
X'00000008'	ESTAE create failed for ESTAE for BPESVCI0. R0 = return code from ESTAE.
X'0000000C'	BLDL failed for BPE SVC module. R0 = return code from BLDL.
X'00000010'	GETMAIN failed for storage for the SVC module. R0 = return code from GETMAIN.
X'00000014'	LOAD failed for the SVC module. R0 = return code from LOAD.
X'00000018'	Exclusive ENQ on resource name

	SYSZBPE SVCUPDTE failed. R0 = return code from ENQ.
X'0000001C'	Exclusive ENQ on SYSZSVC TABLE failed. R0 = return code from ENQ.
X'00000020'	Unable to find MVS ECVTCTBL (CVT to CVTECVT to ECVTCTBL = 0). The z/OS system must be at least SP 4.2.0, with APARs OW13312 and OW13315 applied.
X'00000024'	GETMAIN failed for BPE Global Function Vector Table (BPEGFVT) block. R0 = return code from GETMAIN.
X'00000028'	GETMAIN failed for SVC control area (SVCA) block. R0 = GETMAIN return code.
X'0000002C'	SVCUPDTE failed for the BPE SVC. R0 = SVCUPDTE return code.
X'00000040'	An ABEND occurred while initializing the SVC. R0 = the abend code.
X'000000FC'	The parameter list version generated by the macro is not supported by the called service routine. This is likely due to a macro/module mismatch.

BPETCBSW

Description: Switch execution to a new TCB.

Return Code	Explanation
X'00000000'	The thread was successfully switched.
X'00000004'	An invalid TCB token was passed on TCBTKN.
X'00000008'	An invalid TCB index was passed on TCBIDX.
X'0000000C'	An invalid TCBT address was passed.
X'00000010'	The caller is not running under a BPE thread.
X'00000014'	The TCB specified by TCBTKN (or TCBTKNPTR) does not exist.
X'00000018'	A non-pool TCB type with multiple TCBs was specified on either TCBTYPE or TCBIDX.
X'000000F8'	The requested function is not present in the BPE system at run time. This situation is likely due to a macro or module mismatch.
X'000000FC'	The parameter list generated by the macro is not supported by the called service routine. This situation is likely due to a macro or module mismatch.

BPETHDCR

Description: Create a thread.

Return Code	Explanation
X'00000004'	Create failed: An invalid BPE TCB token was passed on the TCBTKN parameter.
X'00000008'	Create failed: A bad TCB index value was passed on the TCBIDX parameter.
X'0000000C'	Create failed: A zero routine address was passed on the ROUTINE parameter.
X'00000010'	Create failed: A bad TCB table entry address was passed into the thread create routine. The BPETHDCR macro determines the TCBT address based on whichever of the TCBIDX, TCBTKN, or TCBTYPE parameters is specified. Ensure that this parameter is correctly coded.
X'00000014'	Create failed: Unable to get storage for a Thread Control Block (THCB) for the thread.
X'00000018'	Create failed: Unable to get stack storage for the thread.
X'0000001C'	Create failed: The initial POST of the thread failed.
X'00000020'	Create failed: Unable to load the requested thread module.
X'000000F8'	The requested function is not present in the BPE system at execution time. This is likely due to a macro/module mismatch.
X'000000FC'	The parameter list version generated by the macro is not supported by the called service routine. This is likely due to a macro/module mismatch.

BPETIMER

Description: Issue a timer request.

Return Code	Explanation
X'00000004'	FUNC=TIMER request was canceled.
X'00000008'	The request was canceled because the timer service has been shutdown.
X'0000000C'	FUNC=CANCEL request failed because no outstanding timer request with a matching token could be found.
X'00000010'	The timer AWE enqueued to the timer service contained an invalid function code.

X'00000014' The FUNC=TIMER request indicated that the expiration value was specified as TOD. The current version of timer services does not support TOD=.

X'00000018' The DINTVL parameter contained a non-decimal digit.

X'00000020' The minutes field in the DINTVL parameter was greater than 59. It must be between 0 and 59.

X'00000024' The seconds field in the DINTVL parameter was greater than 59. It must be between 0 and 59.

X'00000028' The FUNC=TIMER request could not be processed because the timer service could not get storage for a timer queue element (TQUE) for the request.

X'0000002C' The BPETIMER request failed: MVS STIMERM service returned a nonzero return code.

X'00000080' Unable to obtain an AWE from control block services (BPECBGET) to initiate timer request. Register 0 contains the return code from BPECBGET. No timer request was issued.

X'00000084' Unable to enqueue initiate timer request. AWE enqueue to timer server failed. R0 contains the return code from BPEAWSRV FUNC=ENQ. Note that the state of the AWE is indeterminate. It is probably on an AWE queue, but it may or may not be processed.

X'000000F8' The requested function is not present in the BPE system at execution time. This is likely due to a macro/module mismatch.

X'000000FC' The parameter list version generated by the macro is not supported by the called service routine. This is likely due to a macro/module mismatch.

BPETRSRV

Description: Request trace services.

Return Code	Explanation
X'00000004'	There is no trace table of the requested type defined to BPE.
X'00000008'	Input trace token was not valid or was not for a trace table of the indicated type. (FUNC=DELETE, GETUDATA, SETUDATA)
X'0000000C'	The trace table specified was not defined as a trace type that supports multiple trace tables. The CREATE and DELETE functions may be issued only for trace types that were defined as multiple types. See BPETRDEF and BPETRIX for further information. (FUNC=CREATE and DELETE)
X'00000010'	The user data address passed on USERDATA was invalid (less than 00001000). (FUNC=GETUDATA and SETUDATA)
X'00000014'	The trace table specified does not support user data (UDATALEN was not specified or specified zero on the trace table's BPETRDEF definition). (FUNC=GETUDATA and SETUDATA)
X'00000030'	Unable to get the storage required for a trace table header entry for the new trace table. (FUNC=CREATE)
X'00000034'	Unable to get the storage required for the new trace table. (FUNC=CREATE)
X'000000F8'	The requested function is not present in the BPE system at execution time. This is likely due to a macro/module mismatch.
X'000000FC'	The parameter list version generated by the macro is not supported by the called service routine. This is likely due to a macro/module mismatch.

BPEUXRF0

Description: Load user exits.

Return Code	Explanation
X'00000001'	Couldn't read BPE PROCLIB (Rsn code = BPERDPDS RC)
X'00000002'	Couldn't read user-product PROCLIB (Rsn code = BPERDPDS RC)
X'00000003'	BPEGETM failed for BPE parse data area (Rsn code = BPEGETM RC)
X'00000004'	BPEGETM failed for BPE parse data area (Rsn code = BPEGETM RC)
X'00000005'	BPEPARSE failed for BPE exit list PROCLIB member (Rsn code = BPEPARSE RC)
X'00000006'	BPEPARSE failed for user prod exit list PROCLIB member (Rsn code = BPEPARSE RC)
X'00000010'	BPECBGET failed for a UIXB block (Rsn code = BPECBGET RC)
X'00000011'	BPELAGET failed for global user exit latch (UXRF_Lhdr) (Rsn Code = BPELAGET RC)

X'00000012' User exit refresh failed due to abend in refresh processing (Rsn code = abend code)

X'00000013' BPECBGET failed for a static work area for a user exit module (Rsn code = BPECBGET RC)

X'00000014' BPEGETM failed for storage for a user exit module (Rsn code = BPEGETM RC)

X'00000015' BLDL failed for a user exit module (Rsn code = BLDL RC)

X'00000016' LOAD failed for a user exit module (Rsn code = LOAD RC)

Chapter 2. CQS Codes

This section contains:

- "CQS User Abend Codes"
- "CQS Restart and Rebuild Reason Codes" on page 18
- "CQS Service Return Codes" on page 25

For a general explanation of user abend codes, see "Introduction to Abend Codes" on page 1.

For a description of the CQS Control List entries, see Appendix H, "CQS Control List Entries," on page 663.

CQS User Abend Codes

This topic identifies and explains user abend codes issued by Common Queue Server (CQS).

0001

Explanation: A failure occurred during CQS address space initialization.

Subcode	Explanation
X'00000004'	The CQS address space initialization module CQSINIT0 was not authorized to run in key 7.

System Action: CQS address space initialization terminates abnormally with this abend code.

System Programmer Response: Ensure that:

- Module name CQSINIT0 is defined in the program properties table (PPT) to run in key 7.
- CQSINIT0 is linked into SDFSRESL with AC(1).

0010

Explanation: A failure occurred during CQS initialization. Refer to the abend subcode for the cause of the failure. Message CQS0001E, which is issued before this abend, displays associated return codes and information related to the failure.

Subcode	Explanation
X'00000004'	Storage allocation failure for the CQS anchor block.
X'00000008'	Storage allocation failure for the BPEPARSE work area.
X'0000000C'	Storage allocation failure for a CQS structure block.
X'00000010'	Storage allocation failure for CQSLRRT.
X'00000030'	Error while reading the CQSIPxxx PROCLIB member.
X'00000034'	Error while reading the CQSSLxxx PROCLIB member.
X'00000038'	Error while reading the CQSSGxxx PROCLIB member.
X'00000050'	Error while parsing the CQS execute parameters. Refer to error message BPE0003E to determine the parsing error.
X'00000054'	Error while parsing the CQSIPxxx PROCLIB member. Refer to error message BPE0003E to determine the parsing error.
X'00000058'	Error while parsing the CQSSLxxx PROCLIB member. Refer to error message BPE0003E to determine the parsing error.
X'0000005C'	Error while parsing the CQSSGxxx PROCLIB member. Refer to error message BPE0003E to determine the parsing error.
X'00000070'	Error while validating the structure parameters. One CQS0001E error message is issued for each error.
X'00000080'	Unable to create structure trace table.
X'00000084'	Unable to perform module preload. One CQS0001E error message is issued for each load failure.
X'00000088'	Unable to load and call a lower-level initialization module.
X'000000A0'	Unable to create PUT buffer pool.
X'000000A4'	Unable to create RETRIEVE buffer pool.
X'000000E0'	Unable to initialize z/OS cross-system coupling facility (XCF) communications.
X'000000E4'	Unable to initialize client-to-CQS communications.

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X'00000100' Unable to establish ENF 35 exit.

X'00000104' Unable to establish ENF 38 exit.

X'00000108' Unable to establish ENF 48 exit.

X'00000204' The TM certificate is missing from the LM repository or is unable to initialize usage based pricing.

X'00000300' Initialization encountered an invalid TCB type.

X'00000310' Unable to load restart parent thread routine, CQSIST00.

X'00000314' Unable to load restart child thread routine, CQSIST10.

X'00000318' Unable to load checkpoint parent thread, CQSICHK0.

X'0000031C' Unable to load ENF thread routine, CQSIENF0.

X'00000320' Unable to load overflow parent thread, CQSIOFL0.

X'00000324' Unable to load request parent thread routine, CQSIRQS0.

X'00000360' Unable to create STRM thread for restart parent task, (STRM) TCB.

X'00000364' Unable to create STRD thread for restart child task, (STRD) TCB.

X'00000368' Unable to create CHKP thread for checkpoint task, (CHKP) TCB.

X'0000036C' Unable to create ENF thread for ENF task, (ENF) TCB.

X'00000370' Unable to create OFLM thread for overflow task, (OFLM) TCB.

X'00000374' Unable to create RQST thread for request parent task, (RQST) TCB.

X'00000400' Unable to attach restart child, (STRD) TCB.

X'00000404' Unable to attach log task, (LOG) TCB.

X'00000480' Unable to create AWE queue server XESE.

X'00000484' Unable to create AWE queue server XEST.

X'00000488' Unable to create AWE queue server LOG.

X'0000048C' Unable to create AWE queue server STRU.

X'00000490' Unable to create AWE queue server STE1.

X'00000494' Unable to create AWE queue server STE2.

X'00000498' Unable to create AWE queue server STE3.

X'00000500' Unable to attach checkpoint daughter (CHKD) TCB.

X'00000504' Unable to attach system checkpoint write (CSTW) TCB.

X'00000580' Unable to create AWE create queue server CHKP.

X'00000584' Unable to create AWE queue server CSYS.

X'00000588' Unable to create AWE queue server CSTR.

X'0000058C' Unable to create AWE queue server CSTW.

X'00000680' Unable to create AWE queue server LENF.

X'00000700' Unable to attach overflow child (OFLD) TCB.

X'00000780' Unable to create queue server for overflow processing.

X'00000800' Unable to attach PUT request (RQPT) TCB.

X'00000804' Unable to attach retrieve request (RQRT) TCB.

X'00000808' Unable to attach request (RQOT) TCB.

X'00000880' Unable to create AWE queue server CONN.

X'00000884' Unable to create AWE queue server QRY.

X'00000888' Unable to create AWE queue server BRWS.

X'0000088C' Unable to create AWE queue server DEL.

X'00000890' Unable to create AWE queue server INFM.

X'00000894' Unable to create AWE queue server MOVE.

X'00000898' Unable to create AWE queue server PUT.

X'0000089C' Unable to create AWE queue server READ.

X'000008A0' Unable to create AWE queue server RCVR.

X'000008A4' Unable to create AWE queue server RSYN.

X'000008A8' Unable to create AWE queue server UNLK.

X'000008AC' Unable to create AWE queue server UPD.

0014

Explanation: A failure occurred during structure initialization and restart. Refer to the abend subcode for the cause of the failure. Message CQS0014E or CQS0001E, which might be issued before this abend, displays associated return codes and information related to the failure.

Subcode	Explanation
X'00000004'	Storage allocation failure for the PUT hash table.
X'00000008'	Storage allocation failure for the read hash table.
X'0000000C'	Storage allocation failure for the browse hash table.
X'00000010'	Storage allocation failure for the move hash table.
X'00000014'	Storage allocation failure for the delete hash table.
X'00000018'	Storage allocation failure for the rebuild hash table.
X'0000001C'	Storage allocation failure for the inform hash table.
X'00000020'	Storage allocation failure for the queue type table.
X'00000024'	Storage allocation failure for the CQS log block.
X'00000028'	Storage allocation failure for structure statistics block.
X'0000002C'	Storage allocation failure for overflow hash table.
X'00000080'	Unable to load and call structure connection module CQSIST20.
X'00000084'	Error during load or call of CQSIST30.
X'00000088'	Error during load or call of CQSIST40.
X'0000008C'	Unable to switch to the STRM thread.
X'00000090'	Unable to switch to the STRD thread.
X'000000A0'	Unable to initialize connection to the z/OS system log. If the error was due to an IXGCONN error, register 2 contains the return code and reason code from the IXGCONN request. The first half word contains the return code and the second half word contains the reason code. Refer to *z/OS MVS Programming: Authorized Assembler Services Reference, Volume 2* for additional information about the return and reason code errors from IXGCONN.
X'000000A4'	Storage allocation failure for CQSBRWSE timer AWE.
X'000000A8'	Unable to initialize CQSBRWSE timer.
X'000000AC'	Storage allocation failure for overflow timer AWE.
X'000000B0'	Unable to initialize overflow timer.
X'00000200'	Structure connection failed for one of the following reasons: • The IXLCONN request failed. Register 6 contains the return code and register 7 contains the reason code from the IXLCONN request. • The IXLCONN request succeeded, but the structure attributes were not acceptable to CQS. See message CQS0014E for the reason. Register 6 and register 7 contain zeros, since the IXLCONN request succeeded. CQS disconnects from the structure before abending.
X'00000204'	Unable to lock the control list header. Register 6 contains the return code and register 7 contains the reason code from the IXLLIST REQUEST=LOCK request.
X'00000220'	CQS allocated the primary structure during coupling facility connection (IXLCONN) processing. The coupling facility allocated a primary structure smaller than the minimum allocation size specified by STRMIN= size in the CQS global structure definition PROCLIB member. The CQS0014I message is issued before this abend.
X'00000224'	Unable to create or read the CQSGLOBAL control list entry. Register 6 contains the return code and register 7 contains the reason code from the IXLLIST REQUEST=WRITE or READ request.
X'00000228'	One or more global structure parameters specified as a CQS execution parameter, in the CQSIPxxx PROCLIB member, or in the CQSSGxxx PROCLIB member did not match the values defined in the structure by the CQS that allocated the structure.
X'0000022C'	Unable to create or read the

CQSLOCAL control list entry. Register 6 contains the return code and register 7 contains the reason code from the IXLLIST REQUEST=WRITE or READ request.

X'00000234' Unable to read the CQSSTRCHKPTINPRG control list entry. Register 6 contains the return code and register 7 contains the reason code from the IXLLIST REQUEST=READ request.

X'00000238' Unable to read the CQSRECOVER control list entry. Register 6 contains the return code and register 7 contains the reason code from the IXLLIST REQUEST=READ request.

X'00000244' Unable to read or delete the CQSLOGFULL control list entry. Register 6 contains the return code and register 7 contains the reason code from the IXLLIST request. Message CQS0014E is issued to provide additional error information.

X'00000260' Unable to unlock the control list header. Register 6 contains the return code and register 7 contains the reason code from the IXLLIST REQUEST=UNLOCK request.

X'00000264' Storage allocation failed for the overflow queue name table.

X'00000268' The coupling facility level is down level.

X'0000026C' Unable to create or read the CQSGLOBALCONN control list entry.

X'00000270' An IXLLIST REQUEST=MONITOR_EVENTQ failed.

X'00000274' Unable to get the structure quiesce latch.

X'00000278' Unable to release the structure quiesce latch.

X'00000300' Storage allocation failure for CQSLOCAL data entry buffer.

X'00000304' Storage allocation failure for checkpoint data set control record buffer.

X'00000308' Storage allocation failure for structure recovery data set control record buffer.

X'00000330' Data set allocation failure for checkpoint data set.

X'00000334' Unable to open checkpoint data set.

X'00000338' Unable to read from checkpoint data set.

X'0000033C' Unable to write to checkpoint data set.

X'00000340' Unable to close checkpoint data set.

X'00000344' Unable to deallocate checkpoint data set.

X'00000348' Invalid checkpoint data set. See message CQS0015E, which is issued for this error.

X'00000360' Data set allocation failure for structure recovery data set (SRDS). If a structure checkpoint (CQS0220I) or structure recovery (CQS0240I) is in progress, this error might be timing related. Structure checkpoint and structure recovery allocate the SRDS. The SRDSs remain allocated until the structure process is complete. During this time, if another CQS attempts to initialize, it might find the SRDS already allocated. CQS initialization waits and then retries the allocation. If, after several tries, the data sets are still allocated, initialization abends. In this case, restart the CQS address space.

X'00000364' Unable to open structure recovery data set.

X'00000368' Unable to read structure recovery data set.

X'0000036C' Unable to write to structure recovery data set.

X'00000370' Unable to close structure recovery data set.

X'00000374' Unable to deallocate structure recovery data set.

X'00000390' Unable to recover primary structure. See message CQS0242E for the rebuild failure reason.

X'00000394' Unable to recover overflow structure. See message CQS0242E for the rebuild failure reason.

X'000003A0' Overflow initialization failed. Message CQS0001E is issued to provide additional error information.

X'000003A8' Unable to move queues from primary to overflow structure. Message CQS001E is issued to provide additional error information.

X'000003B0' Unable to delete the log stream during structure cold start processing.

X'000003B4'	Unable to write the initial log record in the log stream during structure cold start processing.

0018

Explanation: An error occurred during CQS restart processing. Message CQS0018E is issued to indicate which structure encountered the error. For certain errors, message CQS0001E is also issued to provide additional information. Abend 0018 subcodes are:

Subcode	Meaning
X'00000004'	BPELAGET failure.
X'00000008'	BPECBGET AWE failure.
X'0000000C'	BPEAWSRV enqueue failure.
X'00000010'	BPELOAD failure.
X'00000014'	BPETHDCR failure.
X'00000040'	Error during restart phase 1. Register 2 contains additional error information from the process that detected the error.
X'00000044'	Error during restart 'Phase 1 Done'. Register 2 contains additional error information from the READ or MOVE process.
X'00000048'	Error during restart 'Phase 1 Abort'. Register 2 contains additional error information from the PUT, READ, MOVE or DELETE process.
X'00000060'	Error during restart phase 2. Registers 2 through 5 contain additional error information. • R2 contains the return code from the PUT process. • R3 contains the return code from the READ process. • R4 contains the return code from the MOVE process. • R5 contains the return code from the DELETE process. Only those processes that encounter an error return a nonzero value. The processes that are successfully completed return a zero value.
X'00000080'	Error during cold start. Registers 2 through 5 contain additional error information. • R2 contains the return code from the PUT process. • R3 contains the return code from the READ process. • R4 contains the return code from the MOVE process. • R5 contains the return code from the DELETE process. Only those processes that encounter an error return a nonzero value. The processes that are successfully completed return a zero value.

System Action: CQS terminates abnormally.

System Programmer Response: Determine the reason for the failure, correct the problem, and restart CQS. Additional information for abend subcodes X'00000040' through X'00000080' can be found in “CQS Restart and Rebuild Reason Codes” on page 18. If you are unable to resolve the problem, save the SYSLOG and dump, and call the IBM Support Center for help.

0020

Explanation: CQS issued the CQS0031A or CQS0032A message to allow the operator to enter the log token from the most recent system checkpoint. The operator entered `CANCEL` to terminate CQS restart processing.

Subcode	Explanation
X'00000004'	The operator replied `CANCEL` to message CQS0031A.
X'00000008'	The operator replied `CANCEL` to message CQS0032A.
X'0000000C'	The operator replied `CANCEL` to message CQS0034A.

0100

Explanation: A failure occurred during z/OS cross-system extended services (XES) exit processing. The subcode gives the reason for the error.

Subcode	Explanation
X'00000004'	CQS initiated an IXLUSYNC request to quiesce the structure. An error occurred while attempting to get the latch, so the structure could not be quiesced.
X'00000008'	A BPEBPGET error occurred.
X'0000000C'	A BPECBGET error occurred.
X'00000010'	A BPEAWSRV enqueue error occurred.
X'00000014'	A BPEAWSRV CREATE error occurred.
X'00000018'	A control entry read error occurred.
X'0000001C'	A QNAME table update error occurred.

System Action: CQS terminates abnormally.

System Programmer Response: Restart CQS.

0104

Explanation: A failure occurred during CQS log processing. Refer to the abend subcode for the cause of the failure.

Subcode	Explanation
X'00000004'	CQS log processing received a return and reason code from the z/OS system logger indicating that z/OS was unable to process work for the log stream. CQS must wait for an ENF 48 signal. When the ENF 48 was received, it indicated that CQS must reconnect to the z/OS log stream. The connection to the log stream failed. Register 2 contains the return code and reason code from the IXGCONN request. The first half word contains the return code and the second half word contains the reason code. Register 3 contains the return code from the CQS log connect service.

System Action: CQS terminates abnormally.

System Programmer Response: Determine the reason for the IXGCONN failure, correct the problem, and restart CQS.

CQS Restart and Rebuild Reason Codes

This topic describes common CQS reason codes associated with CQS messages and CQS abend codes and recommends actions for a system programmer to take when a structure rebuild or CQS restart fails. Table 14 on page 19 provides additional diagnostic information that is common for one or more CQS messages or abends.

General Guidelines for Rebuild Errors

Follow these general steps to address any rebuild failure you encounter:

- If a structure copy initiated by the operator failed, no action needs to be taken to restore access to the structure. The structure is still viable and you still have access. Analyze why the structure copy failed, to determine whether you need to take action to prevent subsequent rebuild failure.
- If a structure rebuild was initiated because of a link failure and the structure rebuild failed, try to restore the link to restore access to the structure. The structure is still viable. Analyze why the structure rebuild failed, to determine whether you need to take action to prevent subsequent rebuild failure.
- Analyze the reason code that appears in the structure rebuild or CQS restart error messages. Consult the CQS Restart and Rebuild Reason Code Table below to analyze the error reason code. Review the “System Programmer Action” column in the table for suggestions on additional actions to take. If the additional action is a note, see the ″System Programmer Action Notes″ table for details.
- If you are unable to resolve the problem, copy the SYSLOG, dump all the CQS address spaces (specifically the rebuild master CQS address space), retain the CQS log records and the IMS log records, and call the IBM Support Center for help.

Description: These reason codes are in the format *ttssrrrr*.

tt One-byte log type, which identifies the type of log record being processed or the CQS process that was executing at the time of the error.

Code	Meaning
X'00'	CQSLRR00 detected the error
X'03'	Client connect process or client connect log record
X'07'	Put process or Put log record
X'08'	Read process or Read log record
X'0B'	Move process or Move log record
X'0D'	Delete process or Delete log record
X'43'	Structure rebuild process or structure rebuild log record

X'44' Structure overflow process or structure overflow log record

ss One-byte log subtype. If a log record was being processed when the failure occurred, this field is nonzero. When the field is zero, then the restart or rebuild process was not currently processing a log record. Log record subtypes are defined in the log record DSECTs. Refer to *IMS Version 9: Common Queue Server Guide and Reference* to determine how to locate log record DSECTs.

rrrr Two-byte reason code.

The following reason codes are used when the *tt* field is X'00'.

Code	Meaning
X'0004'	The CQS log record router called the CQS logger to start reading a series of log records. The CQS logger determined that the read start value is zero.
X'0008'	The CQS log record router called the CQS logger to start reading a series of log records. The CQS logger determined that the read stop value is zero.
X'000C'	The CQS log record router called the CQS logger to start reading a series of log records. No log record was found that met the search criteria.
X'000E'	Structure recovery is rejected because the resource structure does not support structure recovery. Resource structures do not support checkpoint and therefore cannot support structure recovery.
X'000F'	Structure recovery was rejected for a structure that does not support structure recovery. If a link to a structure is lost and no CQS has access to the structure to perform structure copy, then CQS attempts to perform structure recovery. CQS rejects the structure recovery for a structure that does not support structure recovery, such as a resource structure. To make the structure available again, either restore the link or cause a structure failure to initiate structure repopulation.
X'0010'	The CQS log record router passed the CQS logger an invalid subfunction.
X'0014'	The CQS log record router called the CQS logger and received an internal log error return code.

The reason codes shown in Table 14 are used when the *tt* field is X'03', X'07', X'08', X'0B', X'0D', X'43', or X'44'. Table 14 lists the possible reason codes that may appear on CQS restart or structure rebuild error messages. The table includes the meaning of each reason code, plus suggested system programmer actions to take. Table 15 on page 23 gives further details about the system programmer action to take.

Table 14. CQS Restart and Rebuild Reason Codes

Code	Meaning	System Programmer Action (see Table 15 on page 23 for details)
X'0001'	IXL request error accessing the structure.	Retry rebuild (1).
X'0002'	Structure full.	Enlarge structure (3).
X'0003'	Rebuild structure initialization error.	Evaluate message CQS0014E, which contains the specified structure initialization error. Retry rebuild (1).

Table 14. CQS Restart and Rebuild Reason Codes (continued)

Code	Meaning	System Programmer Action (see Table 15 on page 23 for details)
X'0004'	Structure failure.	For the CQS restart error, try bringing CQS back up. For rebuild error, retry rebuild (1).
X'0005'	Control list header get lock error.	Retry rebuild (1).
X'0006'	Control list header release lock error.	Retry rebuild (1).
X'0007'	CQSRECOVER control list entry create error.	Retry rebuild (1).
X'0008'	CQSRECOVER control list entry update error.	Retry rebuild (1).
X'0009'	CQSGLOBALCONN control list entry read error.	Retry rebuild (1).
X'000A'	CQSGLOBALCONN control list entry write error.	Retry rebuild (1).
X'000B'	Rebuild structure connect error. None of the CQSs could connect to the rebuild structure.	Adjust CF usage (2).
X'000C'	Rebuild structure connect error. This CQS could not connect to the rebuild structure.	Retry rebuild (1).
X'000D'	Rebuild structure connect error. There was no suitable coupling facility to allocate the structure based on preference list and structure size specified in the active CFRM policy. This problem also can be caused by a coupling facility failure due to problems increasing the structure size (STRSIZE).	Adjust CF usage (2).
X'000E'	Structure rebuild has timed out, most likely because the rebuild master abended.	None. CQS automatically attempts the rebuild again.
X'0010'	CQSTBL SCAN request error.	Shut down CQS (4).
X'0011'	CQSTBL SCANEND request error.	Shut down CQS (4).
X'0012'	CQSTBL FIND request error.	Shut down CQS (4).
X'0013'	CQSTBL FINDFRST request error.	Shut down CQS (4).
X'0014'	CQSTBL ADD request error.	Shut down CQS (4).
X'0015'	CQSTBL DELETE request error.	Shut down CQS (4).
X'0016'	CQSTBL DELETEALL request error.	Shut down CQS (4).
X'0017'	Table storage allocate error (BPECBGET).	Shut down CQS (4).
X'0018'	CQSTBL UNLOCK request error.	Shut down CQS (4).
X'0019'	CQSTBL FIND or DELETE request error for move table.	Shut down CQS (4).
X'001A'	CQSTBL FIND request error.	Shut down CQS (4).
X'0020'	GETMAIN storage allocate error (BPEGETM).	Shut down CQS (4).
X'0021'	GETMAIN storage free error (BPEFREEM).	Shut down CQS (4).
X'0022'	Control block storage allocate error (BPECBGET).	Shut down CQS (4).
X'0023'	Control block storage release error (BPECBREL).	Shut down CQS (4).
X'0024'	Latch get error (BPELAGET).	Shut down CQS (4).
X'0025'	Latch release error (BPELAREL).	Shut down CQS (4).
X'0026'	AWE queue server create error.	Shut down CQS (4).
X'0027'	AWE enqueue to a queue server error.	Shut down CQS (4).
X'0028'	Buffer pool storage allocate error (BPEBPGET).	Shut down CQS (4).

Table 14. CQS Restart and Rebuild Reason Codes (continued)

Code	Meaning	System Programmer Action (see Table 15 on page 23 for details)
X'0029'	Buffer pool storage release error (BPEBPREL).	Shut down CQS (4).
X'0030'	Rebuild phase 2 error reading log records (CQSLRR00).	Shut down CQS (4).
X'0040'	CQSLHS request error.	Shut down CQS (4).
X'0041'	CQSLOG WRITE request error.	Retry CQS restart (5).
X'0043'	PUT table update error (CQSPTTRQ).	Shut down CQS (4).
X'0044'	READ table delete error (CQSRDDEL).	Shut down CQS (4).
X'0045'	Data Object Entry allocate storage error (BPEBPGET).	Shut down CQS (4).
X'0046'	Table invalid status error.	Shut down CQS (4).
X'0047'	Client queues scan error.	Retry CQS restart (5).
X'0048'	Private queues scan error.	None. Not used.
X'0049'	Data object delete error (CQSDLOBJ).	Retry rebuild (1).
X'004A'	Primary structure data object delete error.	Retry CQS restart (5).
X'004B'	Overflow structure data object delete error.	Retry CQS restart (5).
X'004C'	Data object move error (CQSMOV10).	Retry rebuild (1).
X'004D'	Data object move from client queue to private queue error.	None. Not used.
X'004E'	Data object move from private queue to client queue error.	None. Not used.
X'004F'	Data object move from one private queue to another private queue error.	Retry CQS restart (5).
X'0050'	Primary structure move queue data object undo move error.	Retry CQS restart (5).
X'0051'	Overflow structure move queue data object undo move error.	Retry CQS restart (5).
X'0052'	Data object internal unlock error (CQSMOV10).	Retry CQS restart (5).
X'0053'	CQSSTR00 parameter list contains an invalid function code.	Shut down CQS (4).
X'0054'	CQSSTR10 AWE contains an invalid function code.	Retry rebuild (1).
X'0055'	Delete log record contains an invalid queue type value.	Retry rebuild (1).
X'0056'	Rebuild data object entry value is invalid.	None. Not used.
X'0057'	Structure recovery data set read error.	Retry rebuild (1).
X'0058'	Structure recovery data record move failed because it exceeds the size of the buffer.	Retry rebuild (1).
X'0059'	Structure recovery data set 1 open error.	Refer to the CQS0054E message to determine why OPEN failed. Correct the problem, then retry rebuild.
X'005A'	Structure recovery data set 2 open error.	Refer to the CQS0054E message to determine why OPEN failed. Correct the problem, then retry rebuild.
X'005B'	Rebuild table data object entry not found.	Retry rebuild (1).

Table 14. CQS Restart and Rebuild Reason Codes (continued)

Code	Meaning	System Programmer Action (see Table 15 on page 23 for details)
X'005C'	Data object move across structures failed due to data object delete error.	Retry rebuild (1).
X'005D'	Data object move across structures failed due to data object write error.	Retry rebuild (1).
X'005E'	Structure recovery data sets are invalid and CQS cannot rebuild from the beginning of the log. The structure is unavailable until it can be rebuilt or cold started. Structure recovery data sets are invalid when they are inaccessible, empty, or do not contain a structure checkpoint log token.	In order to make the structure available again you can try one of the following: • Initiate another structure rebuild, if the structure recovery data set problem is temporary. • Cancel CQS, restore the structure recovery data sets, then restart CQS to warmstart the structure. • Cancel CQS, then restart CQS, to cold start the structure.
X'0060'	CQSOVFLW FUNC=GETSTRUC request error.	Shut down CQS (4).
X'0061'	Overflow structure control list header lock error.	Shut down CQS (4).
X'0062'	Overflow structure control list header unlock error.	Shut down CQS (4).
X'0063'	CQSOVERFLOW control list entry read error.	Retry rebuild (1).
X'0064'	CQSOVERFLOW control list entry write error.	Retry rebuild (1).
X'0065'	CQSOVERFLOW control list entry delete error.	None. Not used.
X'0066'	CQSOVERFLOWQNAME control list entry read error. The rebuild structure or rebuild structure link may have failed.	Retry rebuild (1).
X'0067'	CQSOVERFLOWQNAME control list entry write error.	Retry rebuild (1).
X'0068'	CQSOVERFLOWQNAME control list entry delete error.	Retry rebuild (1).
X'0069'	CQSOVERFLOWQNMA control list entry write error.	Retry rebuild (1).
X'006A'	CQSOVERFLOWQNMA control list entry delete error.	Retry rebuild (1).
X'006B'	CQSOVERLOWQNMR control list entry write error.	Retry rebuild (1).
X'006C'	CQSOVERFLOWQNMR control list entry delete error.	Retry rebuild (1).
X'00E0'	CQS rebuild master lost connectivity. This rebuild is terminated by CQS taking over the role of rebuild master.	None. CQS initiates a new rebuild.
X'00E1'	IXLEERSP EVENT=DISCFAILCONN request error.	Retry rebuild (1).
X'00E2'	Rebuild stopped by the operator.	None. The operator intentionally stopped the rebuild.
X'00E3'	Rebuild structure full.	Enlarge structure (3).
X'00E4'	Rebuild structure connectivity lost.	Retry rebuild (1).
X'00E5'	Old structure connectivity lost during rebuild.	Retry rebuild (1).
X'00E6'	Rebuild structure failed.	Retry rebuild (1).
X'00E7'	Old structure failed during rebuild.	Retry rebuild (1).
X'00E9'	Rebuild table for a non-recoverable data object not found.	Retry rebuild (1).

Table 14. CQS Restart and Rebuild Reason Codes (continued)

Code	Meaning	System Programmer Action (see Table 15 for details)
X'00EA'	Rebuild data object entry has an invalid log sequence number of zero.	Retry rebuild (1).
X'00EB'	CQS rebuild master failed.	Retry rebuild (1).
X'00EC'	This reason code is issued for one of the following reasons: • A CQS failed before the rebuild master was decided, so the rebuild master is unknown. The structure rebuild process is being taken over for an unknown failed master. The rebuild is terminated by a CQS that detects the failed CQS. That CQS automatically initiates a new rebuild. The remaining CQSs compete for the role of rebuild master. • The structure recovery data set required by rebuild is already in use. • The structure is already quiesced for structure checkpoint, overflow, or rebuild of the other structure of the pair.	If rebuild is not automatically initiated by CQS, retry rebuild (1).
X'00ED'	Rebuild phase 3 processing error. Two rebuild data object entries contain the same log sequence number. The log sequence numbers must be unique.	Retry rebuild (1).
X'00F0'	Data object put error.	Retry rebuild (1).
X'00F1'	Data object move error.	Retry rebuild (1).
X'00F2'	Data object read error.	Retry rebuild (1).
X'00F3'	Log record route error.	Retry rebuild (1).
X'00F4'	Browse table error.	Shutdown CQS (4).
X'00F5'	Client connect status access error.	Retry rebuild (1).
X'00FF'	Unknown error.	Retry rebuild (1).

Table 15. System Programmer Action Notes

System Programmer Action Note	Detailed Action
Retry rebuild (1)	Retry rebuild, in case the rebuild structure failure was caused by an additional failure during rebuild such as rebuild structure failure or rebuild structure link failure. Retry rebuild by issuing the following command: `SETXCF START,REBUILD,STRNAME=`*`strname`* • If rebuild still fails, cancel this CQS with a dump and save the dump. Restart a CQS, if no CQSs are up. Retry rebuild. • If rebuild still fails, select another CQS to cancel with a dump (saving the dump), until a rebuild succeeds or there are no more active CQSs. Restart a CQS and retry rebuild. • If rebuild still fails, consider structure coldstart. Send any CQS dumps you collect to IBM.

Table 15. System Programmer Action Notes (continued)

System Programmer Action Note	Detailed Action
Adjust CF usage (2)	Structure rebuild was unable to allocate the CQS rebuild structure on any of the CFs in the CFRM policy preference list. Analyze CF usage, make adjustments to accommodate the CQS rebuild structure, then retry rebuild: • Analyze CF usage by doing the following: – Display the structure's preference list by issuing the following command: `D XCF,STRUCTURE,STRNAME=`*`strname`* – Display what structures are allocated on each CF in the structure's preference list and how much space they take up by issuing the following command for each CF: `D XCF,CF,CFNAME=`*`cfname`* • Adjust CF usage by trying one or more of the following: – Make room on the CF by decreasing the structure size of other structures, if possible. Issue the following alter command to decrease the structure size of any structure with available free space: `SETXCF START,ALTER,STRNAME=`*`strname`*`,SIZE=`*`size`* – Copy structures to another CF. Issue the following command to copy another structure to another CF to make room on this CF for the CQS structure: `SETXCF START,REBUILD,STRNAME=`*`strnameanother`* Then issue the following command to retry rebuild for this structure: `SETXCF START,REBUILD,STRNAME=`*`strnamethis`* – Change the CFRM policy CF preference list for the CQS structure, so the CQS structure will be rebuilt on a coupling facility with adequate space. Stop the CFRM policy by issuing the following command: `SETXCF STOP,POLICY,TYPE=CFRM,POLNAME=`*`name`* Activate new CFRM policy with different preference list by issuing the following command: `SETXCF START,POLICY,TYPE=CFRM,POLNAME=`*`name`* • Retry rebuild: – Retry rebuild by issuing the following command: `SETXCF START,REBUILD,STRNAME=`*`strname`*
Enlarge structure (3)	Stop the CFRM policy by issuing the following command: `SETXCF STOP,POLICY,TYPE=CFRM,POLNAME=`*`name`* Activate the new CFRM policy defined with a larger structure size by issuing the following command: `SETXCF START,POLICY,TYPE=CFRM,POLNAME=`*`name`* Retry rebuild by issuing the following command: `SETXCF START,REBUILD,STRNAME=`*`strname`*
Shutdown CQS (4)	Cancel this CQS with a dump, save the dump, and contact IBM support for help. Restart a CQS, if none are up. Retry rebuild.
Retry CQS restart (5)	Retry CQS restart by starting CQS again. If CQS restart fails, consider CQS coldstart.

Note: It is possible for *ttssrrrr* to be zero if a module was called and passed an invalid restart or rebuild phase value. This error, however, should not occur.

CQS Service Return Codes

This topic describes common CQS service return codes.

CQSDSS00

Description: Data Set Service.

Return Code	Explanation
X'00000004'	The service was passed an invalid parameter.
X'00000008'	The service encountered an internal error.
X'0000000C'	For the GETCTRL or POINT service, the record does not exist.
X'00000010'	For the GET service, the end of the data set was reached.
X'00000014'	The GET, POINT, 2ND PUTCTRL requests are not allowed during initial load of the data set.
X'00000018'	The VSAM request resulted in a warning return code.
X'0000001C'	The VSAM request resulted in an error return code other than warning. Refer to the CQS0054E message to determine why the VSAM request failed.
X'00000020'	The service encountered an abend, and the retry routine was driven.

CQSDYNA0

Description: Dynamic Allocation Service.

Return Code	Explanation
X'00000004'	The service was passed an invalid function code.
X'00000008'	The service was passed an invalid data set status.
X'0000000C'	The dynamic allocation service failed because the data set is already allocated to either this CQS or another CQS.
X'00000010'	The DYNALLOC request resulted in an error return code. Refer to the CQS0050E message to determine why the DYNALLOC request failed.

CQSISCI0

Description: Initialize Structure Call Interface

Return Code	Explanation
X'00000020'	The structured call interface initialization encountered an unexpected error while attempting to retrieve a z/OS Name/Token (via BPEIEANT).
X'00000024'	The structured call interface initialization was unable to create a z/OS Name/Token (via BPEIEANT).
X'00000028'	The structured call interface initialization was unable to create a z/OS Name/Token (via BPEIEANT) because the Name/Token already existed. This usually occurs when another CQS with the same SSN was started at the same time and has already built a Name/Token.
X'0000002C'	The structured call interface initialization was unable to retrieve information (via BLDL) about a module it was attempting to load.
X'00000030'	The structured call interface initialization was unable to get the STOKEN (via ALESERV) for this CQS.
X'00000034'	The structured call interface initialization was unable to get the TTOKEN (via TCBTOKEN) for the CQS job step TCB.
X'00000038'	The structured call interface initialization was unable to allocate storage (via GETMAIN) for the CGIB.
X'0000003C'	The structured call interface initialization was unable to allocate storage (via GETMAIN) for the CGCT.
X'00000040'	The structured call interface initialization was unable to allocate storage (via GETMAIN) for a linkage routine.
X'00000044'	The structured call interface initialization was unable to allocate storage (via BPEGETM) for the RVVT.
X'00000048'	The structured call interface initialization was unable to allocate storage (via STORAGE) for the CXSH.
X'0000004C'	The structured call interface

initialization was unable to load a module (via LOAD).

X'00000050' The structured call interface initialization was unable to load a module (via BPELOAD).

X'00000054' The structured call interface initialization was unable to add a resource manager (via RESMGR).

X'00000060' The structured call interface initialization was unable to do a BLDL for the SVC module.

X'00000064' The structured call interface initialization was unable to allocate storage (via GETMAIN) for the SVC module.

X'00000068' The structured call interface initialization was unable to load the SVC module (via LOAD).

X'0000006C' The structured call interface initialization issued a BPESVC REGISTER that failed.

X'00000080' The structured call interface initialization was unable to allocate storage, using BPEGETM, for the interface buffer manager control blocks.

X'00000084' The structured call interface initialization was unable to load the interface buffer manager module CQSRQBM0, using BPEGETM.

X'00000088' The structured call interface initialization was unable to allocate storage, using BPEGETM, for the interface buffer pool.

CQSIXCF0

Description: Initialize XCF communications.

Return Code	Explanation
X'00000020'	The initialization XCF service was unable to allocate storage (via BPEGETM) for control blocks.
X'00000024'	The initialization XCF service was unable to allocate storage (via BPEGETM) for an XCF answer area.
X'00000028'	The initialization XCF service was unable to join the XCF group. There is already a CQS in the group with this subsystem name.
X'0000002C'	The initialization XCF service was unable to join the XCF group.
X'00000030'	The initialization XCF service was unable to obtain information about the other members of the XCF group (via IXCQUERY).
X'00000034'	The initialization XCF service was unable to add all current members of the XCF group to its XCFM table.

CQSLOG10

Description: Connect to CQS log.

Return Code	Explanation
X'00000004'	The CQS log connect process issued an MVS IXGCONN request that failed. The log stream name is invalid. The log stream name is defined to CQS in the CQSSGxxx PROCLIB member. Ensure the log stream name is defined correctly to both CQS and z/OS.
X'00000010'	An error occurred while switching to the BPE JSTP TCB.
X'00000014'	An error occurred while switching to the CQSLOG10 caller's home TCB.
X'00000018'	The function code passed to CQSLOG10 is invalid.
X'00000020'	The CQS log connect process issued an MVS IXGCONN request that failed.
X'00000028'	The CQS log connect process issued an MVS IXGCONN request that failed. The return code indicated the caller should wait for an ENF 48 signal, but the caller did not want to wait.

CQSLOG20

Description: Write log record.

Return Code	Explanation
X'00000004'	The address of the log record passed to CQSLOG20 is not valid.
X'00000008'	The length of the log record passed to CQSLOG20 is not valid.
X'0000000C'	The log stream is full and the caller will not wait for the log stream to become available.
X'00000020'	The CQS log write process issued an MVS IXGWRITE request that failed.

CQSLOG40

Description: Delete log records.

Return Code	Explanation
X'00000004'	The log token passed to CQSLOG40

	is either not valid or the log record it represents is no longer in the log stream.
X'0000001C'	The subfunction code passed to CQSLOG40 is not valid.
X'00000020'	The CQS log delete process issued an MVS IXGDELET request that failed.

CQSLOGP0

Description: Purge CQS batched log records at abnormal termination.

Return Code	Explanation
X'00000000'	The purge was successful. All unwritten batched log records were purged to the z/OS log.
X'00000008'	At least one set of batched log records could not be purged because the z/OS log stream was not available.
X'00000010'	At least one set of batched log records could not be purged because the computed length of the log record was invalid. The reason code contains the last bad record length.
X'00000018'	At least one set of batched log records could not be purged because the IXGWRITE call to purge them received a non-zero return code. The reason code contains the last non-zero IXGWRITE return code in the high halfword, and the reason code in the low halfword.

CQSMOV10

Description: CQSREAD resynchronization process.

Return Code	Explanation
4	Structure or connection failure.
8	Lock token is invalid.
12	Queue name is invalid.
16	Internal error.
20	CQSMOV1P parameter value error.
24	No data object exists.
28	Queue full on structure.
30	Object lost due to rebuild.
34	Successful, but Read Table scan ended because of log full.

CQSOFL50

Description: Overflow services (functions Overflow initialization and Move Queues to Overflow Structure).

Return Code	Explanation
X'00000008'	The service was passed an invalid function code.
X'0000000C'	The overflow service encountered an internal error.
X'00000010'	The overflow service issued an BPETHDCR request that failed.
X'00000014'	The overflow service was unable to allocate storage (via BPEBPGET) for a buffer.
X'00000018'	The overflow service was unable to obtain the lock on control list header.
X'0000001C'	The overflow service was unable to release the lock on control list header.
X'00000020'	The overflow service was unable to read a control list entry.
X'00000024'	The overflow service was unable to write a control list entry.
X'00000028'	The overflow service issued an IXLLIST READLIST request that failed.
X'0000002C'	The overflow service issued an IXLLIST WRITE request that failed.
X'00000030'	The overflow service was unable to obtain structure quiesce latch.
X'00000034'	The overflow service was unable to release structure quiesce latch.
X'00000038'	The overflow service issued an CQSLOG request that failed.
X'0000003C'	The overflow service issued an internal overflow service request that failed.
X'00000040'	The overflow service received a nonzero return code from BPE AWE services.
X'00000044'	The overflow service attempted to translate a queue type into a list header. The CQS service CQSLHS indicated the queue type was invalid.
X'00000048'	The overflow service failed to delete a control list entry.
X'0000004C'	A structure recovery was done for either the primary or overflow structure.
X'00000050'	A structure copy was done for either the primary or overflow structure.

CQSOFL50

X'00000054' A structure failure occurred, and a rebuild was done.

X'00000058' A structure failure occurred and a rebuild was not done.

X'0000005C' An attempt to schedule a client exit was not successful.

X'00000060' A BPECBGET for a control block failed.

X'00000064' No queues were moved to the overflow structure during phase 2 of threshold processing. Threshold processing will not occur again until one of the following occurs:

- CQS is no longer in overflow mode, if CQS was already in overflow mode before the current threshold process started.
- The overflow structure is rebuilt.
- CQS issues the CQS0206I message for the primary structure.

X'00000068' A structure connection was lost.

X'0000006C' A full condition was detected on the primary structure.

X'00000070' A full condition was detected on the overflow structure.

Chapter 3. CSL Codes

This section contains:

- "OM Codes"
- "RM User Abend Codes" on page 34
- "SCI User Abend Codes" on page 36

OM Codes

This topic contains information on "OM User Abend Codes," "CSLOMCMD Return and Reason Codes" on page 30, and "CLSOMREG Return and Reason Codes" on page 33.

OM User Abend Codes

This topic identifies and explains Operations Manager (OM) user abend codes issued by the Common Service Layer (CSL).

0010

Explanation: OM initialization encountered an error that prevented the OM address space from starting. Message BPE0006I is issued with this abend as `0010-`*`xxxxxxx`*, where *xxxxxxx* is the abend subcode. When the abend is issued, Register 15 contains a code that indicates the reason for the abend. This abend might be accompanied by message CSL0001E or CSL0002E, which further explain the problem.

The following list describes the abend subcodes and their meanings:

Code	Meaning
X'010'	The CSLOANCH block could not be allocated.
X'014'	The BPEPARSE work area could not be allocated.
X'018'	The CSLOPLEX block could not be allocated.
X'080'	An error occurred while reading the CSLOIxxx member.
X'0C0'	An error occurred while parsing the OM run time parameter.
X'0C4'	An error occurred while parsing the CSLOIxxx member
X'100'	An error occurred during parameter validation of the CSLOIxxx or OM exec parameters.
X'180'	An error occurred while preloading a module.
X'184'	An error occurred during a call to BPELOAD.
X'1C0'	The BPE buffer pool create service (BPEBPCRE) encountered an error while attempting to create the command buffer pool.
X'1C4'	The BPE buffer pool create service (BPEBPCRE) encountered an error while attempting to create the grammar buffer pool.
X'1C8'	The BPE buffer pool create service (BPEBPCRE) encountered an error while attempting to create the output buffer pool.
X'200'	A CSLZARM0 error occurred, which is an Automatic Restart Manager error.
X'204'	A CSLZLIC0 error occurred, which is a License Manager Authorization error.
X'400'	The TCB type is unknown.
X'440'	An error occurred while CSLOIN10 was attempting to load.
X'4C0'	An error occurred while OM attempted to create an RQST thread.
X'4D0'	CSLOTOT0 failed to load.
X'4D4'	An error occurred while OM attempted to create an RQCR thread.
X'4E0'	The RACROUTE REQUEST-LIST request failed.
X'500'	An asynchronous work element (AWE) could not be created for server RQST.
X'504'	An AWE could not be created for server RQOC.
X'508'	An AWE could not be created for server RQCR.
X'50C'	An AWE could not be created for server RQCR.
X'510'	An AWE could not be created for server RQOU.
X'514'	An AWE could not be created for server RQQY.
X'51C'	An AWE could not be created for server RQRG.
X'530'	A PLEX TRACE table could not be created.

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X'534' The command instance hash table or the command registration hash table (the verb hash table) could not be created.

X'538' SCI registration (CSLSCREG) failed.

X'53C' The SCI Ready function (CSLSCRDY) failed.

X'540' The CSLOSTT statistics block could not be allocated.

System Action: The address space terminates abnormally.

System Operator Response: If the error indicated by the abend subcode is due to environmental conditions (for example, incorrect authorization or invalid parameters), correct the indicated problem and restart the address space. Otherwise, save job log and system log information and contact the IBM Support Center for assistance.

Module: CSLOIN00, CSLOIN10, CSLOIT00, CSLOPL10

CSLOMCMD Return and Reason Codes

The return are reason codes in Table 16 can be returned on a CSLOMCMD macro request.

Table 16. CSLOMCMD Return and Reason Codes

Return Code	Reason Code	Meaning
X'00000000'	X'00000000'	The request completed successfully.
X'02000004'	Any code	This return code indicates a warning. All or part of the request might have completed successfully. Additional information is returned with the response to the request.
	X'00001000'	The command timed out before all of the command response information could be collected. One or more clients might not be responding or a client might have needed more time to process the command. If you specified the TIMEOUT option, make sure that the interval is long enough to allow the command to process. All command response information that is collected prior to the time-out is returned. This reason code is also returned if CSL members such as SCI or RM are not active on the local or remote z/OS image and cannot process the request or return a response. To obtain more information, issue QUERY IMSPLEX to determine which CSL members are inactive. Restart those members and re-issue the request. If this reason code is returned after an INIT OLC or TERM OLC command, issue QUERY MEMBER to determine the online change status of the IMS systems participating in the online change and take action based on their status.
	X'00001004'	The INPUT exit rejected the command specified in the CMD field. The command was not processed.
	X'00001008'	The client (specified in the corresponding XML <mbr></mbr> tags in the <cmderr> section) was specified in the ROUTE list for the command specified in the CMD field. However, the specified client was overridden with the ANY option. This option enables routing to any client that processes commands.
	X'0000100C'	The client (specified in the corresponding XML <mbr></mbr> tags in the <cmderr> section) was specified in the ROUTE list for the command specified in the CMD field. However, the specified client was overridden with the ALL option. This option enables routing to all clients that processes commands.

Table 16. CSLOMCMD Return and Reason Codes (continued)

Return Code	Reason Code	Meaning
X'02000008'	Any code	This return code indicates a parameter error. The request was not processed due to the error.
	X'00002000'	The command specified in the CMD field is invalid.
	X'00002004'	The command specified in the CMD field contains a keyword that is invalid with that command.
	X'00002028'	The command string specified in the CMD field contains an invalid keyword.
	X'0000202C'	BPE detected an unknown positional parameter in the command string specified in the CMD field.
	X'00002030'	The command string specified in the CMD field contains a keyword with an equals sign when a sublist was expected. For example, *keyword=* was specified instead of *keyword*().
	X'00002034'	The command string specified in the CMD field contains an incomplete keyword or keyword parameter.
	X'00002038'	The command string specified in the CMD field is missing a keyword.
	X'0000203C'	The command string specified in the CMD field contains an invalid keyword parameter.
	X'00002040'	The command string specified in the CMD field contains a duplicate keyword.
	X'00002044'	The command contains invalid syntax. Text containing the syntax error is returned in the <message></message> XML tags in the error log.
	X'00002050'	The caller of the service attempted to pass an invalid parameter list. The request is rejected.
X'0200000C'	Any code	This return code indicates a list error. The request might or might not have processed. Refer to the <cmderr> section and the completion codes for each command processing client listed in the <cmdrspdata> section.
	X'00003000'	The command was routed to multiple clients. At least one client was able to process the request successfully and return either command response data or a response message to the SPOC. Refer to the completion codes, CC field, for further information.
	X'00003004'	The command was routed to multiple clients. None of the clients were able to process the request successfully. No command response data or response messages were returned.
	X'00003008'	The command was routed to multiple clients. None of the clients that processed the command returned a return code and reason code to the OM. At least one command client returned either command response data or a response message.
	X'0000300C'	The command was routed to multiple clients. Not all of the clients that processed the command returned a return code 0 and reason code 0 to the OM. Also, at least one client returned a return code 4. Refer to the completion codes returned on the request for additional information.

Table 16. CSLOMCMD Return and Reason Codes (continued)

Return Code	Reason Code	Meaning
X'02000010'	Any code	This return code indicates an environmental error. The request could not be processed due to the current environment. This condition might be temporary.
	X'00004000'	The command specified in the CMD field could not be processed by the client indicated in the corresponding <mbr></mbr> tags in the <cmderr> section because the client was not yet ready to process commands.
	X'00004004'	The command specified in the CMD field could not be processed by the client indicated in the corresponding XML <mbr></mbr> tags in the <cmderr> section because the client was not registered for the command.
	X'00004008'	The command specified in the CMD field could not be processed by the client indicated in the corresponding XML <mbr></mbr> tags in the <cmderr> section because the client is not active in the IMSplex.
	X'0000400C'	The command specified in the CMD field could not be processed by the client indicated in the corresponding XML <mbr></mbr> tags in the <cmderr> section because the client registered for the command with an invalid PADEF grammar.
	X'00004020'	This version of the parameter list is invalid.
	X'00004010'	The command specified in the CMD field could not be processed. The client that issued the command is not authorized. Examine the <cmdsecerr> section in the error log to determine why the client is not authorized.

Table 16. CSLOMCMD Return and Reason Codes (continued)

Return Code	Reason Code	Meaning
X'02000014'	Any code	This return code indicates a system error. An internal error occurred. The command was not processed.
	X'00005000'	An internal OM error occurred while allocating a CMD block for processing of the command specified in the CMD field. Contact the IBM Support Center.
	X'00005004'	An internal OM error occurred while allocating a CRSP block to process the command specified in the CMD field. Contact the IBM Support Center.
	X'00005008'	An internal OM error occurred while allocating the command input buffer to process the command specified in the CMD field. Contact the IBM Support Center.
	X'0000500C'	An internal OM error occurred while processing of the command specified in the CMD field. Contact the IBM Support Center.
	X'00005010'	An internal OM error occurred while obtaining storage for the parsed output blocks to parse the command specified in the CMD field. Contact the IBM Support Center.
	X'00005014'	An internal OM error occurred while adding the CMD block to the command instance hash table during processing of the command specified in the CMD field. Contact the IBM Support Center.
	X'00005018'	An internal OM error occurred while accessing the CMD block in the command instance hash table during processing of the command specified in the CMD field. Contact the IBM Support Center.
	X'0000501C'	An internal OM error occurred while scanning for the CMD block in the command instance hash table during processing of the command specified in the CMD field. Contact the IBM Support Center.
	X'00005020'	An internal OM error occurred while processing the command specified in the CMD field. The command was not processed by the command processing client. See the <cmderr> section of the error log for the member name of the command processing client, and contact the IBM Support Center.
	X'00005024'	An internal OM error occurred while processing the command specified in the CMD field. The command was not processed by the command processing client. See the <cmderr> section for the member name of the command processing client, and contact the IBM Support Center.
	X'00005028'	An internal OM error occurred while parsing the command specified in the CMD field. Contact the IBM Support Center.

CLSOMREG Return and Reason Codes

The return and reason codes in Table 17 can be returned on a CSLOMREG macro request. Completion codes from CSLOMREG are in Table 18 on page 34.

Table 17. CLSOMREG Return and Reason Codes

Return Code	Reason Code	Meaning
X'00000000'	X'00000000'	The request completed successfully.
X'0200000C'	X'00003000'	The request might or might not have been processed completely. If the OUTPUT parameter is provided on the request, refer to completion codes in the output buffer for error conditions. Completion codes indicate the reason for the error with the resource name. The completion codes that can be returned are described in Table 18 on page 34.

Table 17. CLSOMREG Return and Reason Codes (continued)

Return Code	Reason Code	Meaning
X'02000010'	X'00004010'	The client that issued the command is not authorized.
	X'00004020'	The parameter list version is invalid.
X'02000014'	X'00005034'	An OM internal error occurred. OM was unable to obtain storage for the output buffer.
	X'00005038'	An OM internal error occurred. OM was unable to add the VERB block to the command verb hash table during command processing.
	X'0000503C'	An OM internal error occurred. OM was unable to allocate a CLNT block for the client during command processing.

The completion codes in Table 18 can be returned on a CSLOMREG request. They are returned in the ORGE_CC field of the CSLOREGO macro, which maps the OUTPUT= area if an error occurred during command registration.

Table 18. CLSOMREG Completion Codes

Completion Code	Meaning
X'00000104'	OM was unable to allocate a VERB block for the resource.
X'00000108'	OM was unable to allocate a KWD block for the resource.
X'0000010C'	OM was unable to allocate an MUID block for the resource.
X'00000160'	OM was unable to obtain a latch for the resource.

RM User Abend Codes

This topic identifies and explains Resource Manager (RM) user abend codes issued by the Common Service Layer (CSL).

0010

Explanation: RM initialization encountered an error that prevented the RM address space from starting. Message BPE0006I is issued with this abend as `0010-`*`xxxxxxx`*, where *xxxxxxx* is the abend subcode. When the abend is issued, Register 15 contains a code that indicates the reason for the abend. This abend might be accompanied by message CSL0001E or CSL0002E, which further explain the problem.

The following list describes the abend subcodes and their meanings:

Code **Meaning**

X'00000010' Storage allocation failed for the RM anchor block (CSLRANCH).

X'00000014' Storage allocation failed for the BPEPARSE work area.

X'00000018' Storage allocation failed for the IMSplex block (CSLRPLEX).

X'00000080' An error occurred while reading the CSLRIxxx PROCLIB member.

X'000000C0' An error occurred while parsing RM run time parameters. One CSL0001E message is issued for each run time parameter in error. For more information on determining what the parsing error is, see message BPE0003E.

X'000000C4' An error occurred while parsing the CSLRIxxx PROCLIB member. One CSL0001E message is issued for each parameter in error. For more information on determining what the parsing error is, see message BPE0003E.

X'00000100' An error occurred during parameter validation of the CSLRIxxx or RM exec parameters.

X'00000180' There is an invalid parameter in the CSLRIxxx PROCLIB member or an invalid RM run time parameter. One CSL0001E message is issued for each parameter in error.

X'00000184' A lower-level RM initialization module could not be loaded or called.

X'000001C0' The update buffer pool could not be created.

X'000001C4' The query buffer pool could not be created.

X'00000200' The Automatic Restart Manager (the CSLZARM0 routine) could not be initialized.

X'00000204' Authorization could not be obtained for the license manager (the CSLZLIC0 routine).

X'00000400' The TCB type is unknown.

X'00000440' The RQST TCB initialization routine (CSLRIN10) could not be loaded.

X'000004C0' The RQST thread for the request mother TCB (RQST) could not be created.

X'000004D0' The RM process time-out routine (CSLRTOT0) could not be loaded.

X'000004D4' The TOUT thread for the process request TCB (RQPR) could not be created.

X'00000508' RM-to-CQS communications could not be initialized.

X'0000050C' An AWE for the queue server STRE could not be created.

X'00000510' An AWE for the queue server DEL could not be created.

X'00000514' An AWE for the queue server PRCS could not be created.

X'00000518' An AWE for the queue server QRY could not be created.

X'0000051C' An AWE for the queue server REG could not be created.

X'00000520' An AWE for the queue server UPD could not be created.

X'00000524' RM-to-SCI communications could not be initialized.

X'00000528' PLEX trace tables could not be created.

X'0000052C' SCI could not be notified that RM is ready for work.

X'00000530' The RQDL thread for the request mother TCB (RQST) could not be created.

X'00000534' The RQPR thread for the request mother TCB (RQST) could not be created.

X'00000538' The RQQY thread for the request mother TCB (RQST) could not be created.

X'0000053C' The RQUP thread for the request mother TCB (RQST) could not be created.

X'00000540' Storage allocation failed for the resource type block (CSLRRTYP).

X'00000544' Storage allocation failed for the RM statistics block (CSLRSTT).

X'00000548' An AWE for the queue server CMD could not be created.

X'00000549' An AWE for the queue server NTF could not be created.

X'0000054C' The process hash table could not be created.

X'00000550' The resource structure could not be connected.

X'00000554' The RM global resource block (CSLRGBL) could not be created or updated on the resource structure.

X'00000558' The IMSplex name defined to this RM does not match the IMSplex name defined by RMs that have already successfully joined the IMSplex.

X'0000055C' There are an invalid number of RMs in the IMSplex. If no resource structure is defined, only one RM is allowed in the IMSplex.

X'00000560' SCI could not be queried about the other RMs in the IMSplex.

X'00000564' The structure type is invalid. RM attempted to connect to a structure that is not defined as a resource structure to CQS. The structure defined to RM in the CSLRIxxx PROCLIB member must be defined to CQS as a resource structure in the CQSSGxxx PROCLIB member.

X'00000570' An AWE for the queue server PRCI could not be created.

X'00000574' An AWE for the queue server PRCT could not be created.

X'00000578' An AWE for the queue server PRCR could not be created.

System Action: RM address space initialization terminates abnormally.

System Operator Response: If the error indicated by the abend subcode is due to environmental conditions (for example, incorrect authorization or invalid parameters), correct the indicated problem and restart the address space. Otherwise, save job log and system log information and contact the IBM Support Center for assistance.

Module: CSLRIN00, CSLRIN10, CSLRIT00, CSLRPL10, CSLRL20

SCI User Abend Codes

This topic identifies and explains Structured Call Interface (SCI) user abend codes issued by the Common Service Layer (CSL).

0010

Explanation: SCI initialization encountered an error that prevented the SCI address space from starting. Message BPE0006I is issued with this abend as `0010-`*`xxxxxxx`*, where *xxxxxxx* is the abend subcode. When the abend is issued, Register 15 contains a code that indicates the reason for the abend. This abend might be accompanied by message CSL0001E or CSL0002E, which further explain the problem.

Subcodes Issued by CSLSFRC0

X'00000604'
An SCI with the same name is already active on the OS image.

Subcodes Issued by CSLSIN00

Subcode	Explanation
X'00000010'	An error occurred while allocating a CSLSANCH control block.
X'00000014'	An error occurred while allocating a BPEPARSE work area control block.
X'00000018'	An error occurred while allocating a CSLSPLEX control block.
X'00000080'	An error occurred while reading the CSLSIxxx PROCLIB member.
X'000000C0'	An error occurred while parsing the SCI Execute parameters.
X'000000C4'	An error occurred while parsing CSLSIxxx.
X'00000100'	An error occurred in parameter validation.
X'00000140'	An error occurred in the Trace Table Create action.
X'00000180'	An error occurred in the Module Preload action.
X'00000184'	An error occurred while issuing the BPELOADC macro.
X'000001C0'	An error occurred in the CSLSCQRY Buffer Pool Create action.
X'00000200'	Error in the module CSLZARM0.
X'00000204'	An error occurred in the module CSLZLIC0.
X'00000280'	An error occurred while issuing an ENFREQ 38 Request.

Subcodes Issued by CSLSING0

Subcode	Explanation
X'00000600'	A Name or Token Retrieve error occurred.
X'00000604'	An SCI with the same name is already active on the OS image.
X'00000608'	An error occurred in SGBL allocation.
X'0000060C'	An error occurred in obtaining SGRT storage.
X'00000610'	An error occurred in releasing SGRT storage.
X'00000614'	An ALESERV extract error occurred.
X'00000618'	A TCBTOKEN error occurred.
X'0000061C'	An error occurred in the BLDL macro for an interface module.
X'00000620'	An error occurred while loading an interface module.
X'00000624'	An error occurred while loading a cross memory module.
X'00000628'	An ETCRE error occurred.
X'0000062C'	An error occurred in the BLDL macro call for an SVC module.
X'00000630'	An error occurred while obtaining storage for an SVC module.
X'00000634'	An error occurred while loading an SVC module.
X'00000638'	A BPESVC error occurred.
X'0000063C'	An error occurred when adding a resource manager.
X'00000640'	An error occurred in the BLDL macro for a stub module.
X'00000644'	An error occurred when obtaining storage for a stub module.
X'00000648'	An error occurred while loading a stub module.

Subcodes Issued by CSLSINP0

X'00000700'	A BPEIEANT RETRIEVE error occurred.
X'00000704'	BPECBGET for an RMBR block encountered an error.

X'00000708' BPECBGET for a TYPL block encountered an error.

X'00000070C' A BPEHTADD error occurred for a name table.

X'00000710' A BPEHTADD error occurred for a token table.

X'00000714' A BPEGETM error occurred for a type table.

X'00000718' A BPEHTCRE error occurred for a name table.

X'0000071C' A BPEHTCRE error occurred for a token table.

X'00000720' STORAGE(OBTAIN) for a PGBL block encountered an error.

X'00000724' A BPEIEANT CREATE error occurred.

X'00000728' A CSLSCREG `func(REGISTER)` error occurred.

X'0000072C' An SCI with the same name is already active on the same z/OS image.

X'00000730' The IMSplex was previously managed by an SCI with a different name on the z/OS image. In order to manage the IMSplex with the new SCI, you must bring up an SCI using the old name with the FORCE=(ALL,SHUTDOWN) startup parameter. This will clean up the global blocks left by the previous SCI and allow you to manage the IMSplex using an SCI with a different name.

X'00000734' STORAGE(OBTAIN) for CMBR failed.

X'00000738' ALESERVE SEARCH failed.

X'0000073C' ALESERV ADD failed.

X'00000740' A CSLSCRDY `func(READY)` error occurred.

X'00000744' An error occurred when adding SCI to the type table.

X'00000748.' A BPEHTCRE error occurred for a type table.

X'0000074C' An IXCSETUS error was encountered.

X'00000750' A BPELAGET error was encountered when obtaining the non-reachable chain latch.

X'00000754' A BPELAREL error was encountered when releasing the non-reachable chain latch.

X'00000780' A BPETHDCR error was encountered when creating the INPO thread.

X'00000784' A BPRWAIT error was encountered waiting for the INPO thread.

X'000007B0' A BPELAGET error was encountered when obtaining the XCFC latch.

X'000007B4' A BPELAREL error was encountered when releasing the XCFC latch.

Subcodes Issued by CSLSPL10

X'00000780'
A BPETHDCR error was encountered creating the INPO thread.

X'00000784'
A BPEWAIT error was encountered waiting for the INPO thread.

Subcodes Issued by CSLSPLR0

X'000007A0'
A BPECBGET error was encountered while obtaining an RMBR block.

X'000007A4'
A BPEHTADD error was encountered when adding to the token hash table.

X'000007A8'
A BPEHTADD error was encountered when adding to the name hash table.

X'000007AC'
An error was encountered when adding to the type table.

Subcodes Issued by CSLSIS00

Subcode	Explanation
X'00000504'	An IPLX create thread error occurred.
X'0000508'	An error occurred while loading CSLTOT0.
X'0000050C'	An RQTO create thread error occurred.
X'00000510'	An error occurred while loading CSLSSRT0.
X'00000514'	An SRTO create thread error occurred.

Subcodes Issued by CSLSIT00 and CSLSIT10

Subcode	Explanation
X'00000400'	An unknown TCB type error occurred.
X'00000440'	An error occurred while loading CSLSIS00.
X'00000444'	A SCIM create thread error occurred.
X'00000448'	A XCFP create thread error occurred.
X'0000044C'	An INTF create thread error occurred.

Subcodes Issued by CSLSXCG0

X'00000800' An SCI with the same name already is active in the IMSplex.

X'00000804' A BPEGETM error was encountered.

X'00000808' A IXCJOIN error was encountered while attempting to join the XCF group.

X'0000080C' A BPECBGET error was encountered.

System Action: SCI terminates abnormally.

Programmer Response: Determine the reason for the failure. Message CSLS0001E or CSLS0002E is issued to provide additional diagnostic information. If you are unable to resolve the problem, save the SYSLOG and dump, and contact the IBM Support Center for assistance.

Module: CSLSIN00, CSLSIT00, CSLSIT10, CSLSIS00, CSLSINP0, CSLPL10, CSLPLR0, CSLSXCG0, CSLING0, CSLSFRC0.

Chapter 4. IMS Abend Codes, 0002 - 2991

This section explains:

- “Standard Abends”
- “Pseudoabends”
- “System Abend Codes”
- “IMS User Abend Codes 0002 - 2991”

For a general explanation of user abend codes, see “Introduction to Abend Codes” on page 1. For explanations of user abends 3000 - 4095, see Chapter 5, “IMS Abend Codes 3000 - 4095,” on page 141.

Standard Abends

When running IMS in a batch environment with an application program and the IMS control program in the same region, any abnormal condition encountered in the control program that causes an abend will also cause the entire task, the control program, and the application program to abend with a user code generated by IMS.

Pseudoabends

When running in an online environment with application programs and the IMS program in separate regions, some abnormal conditions encountered in the control program are related to a single application program running in an MPP, BMP, or IFP region. In these cases, IMS transfers the abend condition to the application program that was responsible for the abnormal condition. This allows the control program to continue to run and service other message regions. MPP, BMP, or IFP dependent region abends are referred to as pseudoabends, and the abend code used to terminate the application program is the same code that would have been used to terminate the IMS program. In addition, pertinent IMS control blocks from the control region are snapped to the IMS log in type X'67' log records.

System Abend Codes

AC6

Explanation: IMS uses this z/OS abend code when forcibly terminating one z/OS task from another z/OS task. There are two situations where this occurs.

- An ESTAE routine gained control because of an abend in the system. This abending task attempts to purge the log buffers after it signals the physical log task (the owner of the buffers) of its intention. If the abending task does not receive a response within one second, the physical log task is terminated with this abend. In either case, log buffers are purged.
- The DBRC instance required for this instance of the isolated log sender (ILS) terminated. All remaining ILS instances dependent upon the abended DBRC wait for that DBRC until they are abended with this abend and reason code X'01'

Module: DFSFDLF0, DFSIL220

IMS User Abend Codes 0002 - 2991

This topic identifies and explains user abend codes issued by IMS. Each code is 4 decimal digits.

0002

Explanation: When the IMS control region abnormally terminates, it forces this abend for active dependent regions. This abend can also occur after normal shutdown of the control region if a new dependent region attempts to start.

System Action: The dependent regions are abnormally terminated.

System Operator Response: Follow IMS restart procedures.

Problem Determination: None.

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0005

Explanation: IMS restart was unable to close (terminate) the input online log data set (OLDS). Refer to messages DFS0738I and DFS0738X for further explanation.

System Action: IMS terminates abnormally.

Programmer Response: Use the Log Recovery utility to close (terminate) the log.

Problem Determination: 1, 5, 8, 11, 35, 40

Save a copy of the OLDSs and WADSs data sets.

006

Explanation: The License Manager did not find a certificate for either the DB or the TM feature. See message DFS2930I to determine which (or both features) do not have a certificate.

System Action: The region that issued the abend terminates.

Programmer Response: Add the necessary certificates to LM or change the LM mode so that it grants requests even when certificates do not exist.

Module: DFSXSTM0

0008

Explanation: The amount of storage specified for the region is insufficient to build TABLE zzzzzzzz. This prevents IMS from acquiring the information needed for initialization. Message DFS0610W, issued prior to this abend, identifies the TABLE name and provides additional information.

System Action: IMS terminates abnormally.

Programmer Response: Increase the size of the region.

Master Terminal Operator Response: Increase the size of the region, and retry IMS.

Problem Determination: 1, 3, 6, 8

0009

Explanation: The OPEN failed for a data set. This prevents IMS from acquiring information required for initialization. Message DFS0597W, issued prior to this abend, identifies DDNAME xxxxxxxx and provides additional information.

System Action: IMS terminates abnormally.

Programmer Response: Refer to DFS0597I. Check the DDNAME xxxxxxxx data set.

Problem Determination: 1, 3, 6, 8

0010

Explanation: The data set cannot be processed because the data set record format is not valid. This prevents IMS from acquiring information required for initialization. Message DFS0604W, issued prior to this abend, identifies DDNAME xxxxxxxx and provides additional information.

System Action: IMS terminates abnormally.

Programmer Response: Refer to message DFS0604W. Be sure the DDNAME xxxxxxxx data set has RECFM=F or RECFM=FB.

Problem Determination: 1, 3, 6, 8

0011

Explanation: An attempt was made to enter the system console DDM entry point to handle a WRITE interrupt. This entry point does not exist.

System Action: IMS terminates abnormally.

Programmer Response: Make certain that CSECT DFSICIO0 has not been user-modified, nor any other user modification branches to CSECT DFSDNSC0.

Problem Determination: 1, 2, 3, 4, 5, 11, 12, 35

0012

Explanation: The data set cannot be processed because the block size is invalid. This prevents IMS from acquiring information required for initialization. Message DFS0605W, issued prior to this abend, identifies DDNAME xxxxxxxx and provides additional information.

System Action: IMS terminates abnormally.

Programmer Response: Refer to message DFS0605W. Be sure the DDNAME xxxxxxxx data set has a block size that is a multiple of 80.

Problem Determination: 1, 3, 6, 8

0013

Explanation: The system log for IMS batch could not be opened.

System Action: IMS terminates abnormally.

Programmer Response: Make sure the DD statement for the IEFRDER has been included and is specified correctly, then resubmit the job.

0014

Explanation: The IMS system logger passed an invalid log call. Register 15 contains a return code. For details on the return code, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: IMS terminates abnormally.

Master Terminal Operator Response: Save the log data set. Contact your IMS system programmer to restart.

Programmer Response: The user can emergency restart IMS. The save area trace shows who called the logger with the invalid request.

Problem Determination: 1, 4, 5, 35

0015

Explanation: The data set does not contain the required member. This prevents IMS from acquiring information required for initialization. Message DFS0579W, DFS0596W, DFS3652X, or DFS3659X identifies the name of the member not found and provides additional information. If message DFS3652X was issued, neither DFSDSCTy (where y is specified by the DSCT=EXEC parameter) nor DFSDSCMy (where y is the nucleus suffix specified by the SUF=EXEC parameter) was found in IMS.PROCLIB, or did not contain at least one valid logon descriptor and one valid user descriptor.

System Action: IMS terminates abnormally.

Programmer Response: Refer to messages DFS0579W, DFS0596W, DFS0671W, DFS3652X, and DFS3659X.

Problem Determination: 1, 3, 6, 8

0016

Explanation: The IMS system abnormally terminates for one of these reasons:

- The request for storage (in subpool 0 of the IMS control region extended private area) for a hash table for the VTAM® control blocks failed.
- The VTAM control blocks (DFSCLVyx) could not be initialized. (**y** is a value from 0 to 9 or A to F; **x** is the IMS nucleus suffix).
- The VTAM control blocks modules could not be loaded.
- The request for storage (in subpool 0 of IMS control region extended private area) for a hash table for the CNT/LNB/RCNT, SPQB, or CCB control blocks was unsuccessful.
- The request for storage (in subpool 0 of IMS control region extended private area) for a bit map for CCB control blocks was unsuccessful.
- The LQB/RCNT control blocks modules (DFSCLCms, DFSCLSms, DFSCLRms, DFSCLIDs, where m is a value from 0 to 9 or A to F; s is the IMS nucleus suffix) could not be initialized.
- The LQB/RCNT control blocks modules (DFSCLCms, DFSCLSms, DFSCLRms, DFSCLIDs, where m is a value from 0 to 9 or A to F; s is the IMS nucleus suffix) could not be loaded.
- The request for storage (in subpool 0 of the IMS control region extended private area) for a work area or for system logon and user descriptors for creation of temporary structures was unsuccessful.
- The request for storage (in subpool 0 of the IMS control region extended private area) for hash tables for logon and user descriptors was unsuccessful.
- The request for storage (in subpool 214 of the IMS control region extended private area) for the VTAM control blocks failed.

Message DFS1990I, DFS1991I, DFS1992I, DFS1993I, DFS1996I, DFS1998I, or DFS1999I was issued previously to describe the error.

System Action: IMS terminates abnormally.

Programmer Response: See message DFS1990I, DFS1991I, DFS1992I, DFS1993I, DFS1996I, DFS1998I, or DFS1999I to determine the appropriate action.

Problem Determination: 4, 6, 8, 10

0017

Explanation: During writing or deallocating a log buffer, the physical logger found the buffers out of sequence.

System Action: IMS terminates abnormally.

System Operator Response: Emergency restart IMS to resume processing.

Problem Determination: 1, 4, 5, 35

0019

Explanation: The component number in the CNT is greater than the maximum allowed. Register 10 contains the address of the CNT in error.

System Action: IMS terminates abnormally.

System Operator Response: Emergency restart IMS to resume processing.

0020

Explanation: The IMS system or the specified external subsystem task was terminated by the use of the `MODIFY` command.

System Action: All of IMS or the specified external subsystem task will terminate. If an external subsystem was specified, only that task will terminate, while the remainder of IMS continues processing.

Programmer Response: You should determine the cause of modifying IMS and take corrective action.

System Operator Response: Restart IMS if an external subsystem task terminated. You can restart it by issuing the `/START SUBSYS` command.

0021

Explanation: The physical log master ITASK or the set up ITASK was posted with an invalid request element.

System Action: IMS terminates abnormally.

System Operator Response: Emergency restart IMS to resume processing.

Problem Determination: 1, 4, 15, 35

0022

Explanation: On SESSIONC completion, the session control code in the RPL is invalid (not STSN, SDT, or CLEAR).

System Action: IMS terminates abnormally.

Programmer Response: None required.

Problem Determination: 11, 35. At the time of the abend, register 6 contains the address of the buffer that contains the RPL in error.

0023

Explanation: The DL/I subordinate address space option was selected. The ACBLIB data sets specified in the DL/I subordinate address space procedure were not the same as the specification in the IMS procedure. Message DFS0404W precedes this abend and provides further information.

System Action: The DL/I subordinate address space terminates abnormally with a U0023, causing the control region to terminate with a U150.

Programmer Response: The ACBLIB data sets specified in the DL/I subordinate address space start-up procedure must be the same as specified in the control region JCL and the concatenation order must be identical. This applies to both the active and inactive ACBLIBs. Correct the specification of the ACBLIB DDNAMES IMSACBA and IMSACBB. If it is necessary to analyze the storage dump, the MVS Scheduler Work Area blocks must be included. Specify SDATA=SWA on the z/OS `CHNGDUMP` command to include these blocks.

0024

Explanation: Either a DL/I subordinate address space region or a DBRC region attempted to connect to the IMS control region. The jobname passed on the connection request did not match the DLINM= (for the DL/I subordinate address space region) or the DBRCNM= (for the DBRC region) specification. These values are obtained from the IMSCTRL system definition macro or from the control region JCL. The defaults for these keywords are "DLISAS" and "DBRC", respectively.

System Action: The region that attempted the connection abends with U0024.

Programmer Response: Start a procedure with the correct name, or restart the control region, overriding the expected name.

0025

Explanation: Either a DL/I subordinate address space region or a DBRC region attempted to connect to the IMS control region. The control region already has an active connection to that region type. This error is caused, for example, by starting the DL/I subordinate address space region twice.

System Action: The region that attempted the connection abends with U0025.

Programmer Response: None.

0026

Explanation: IMS was unable to successfully issue the (E)STAE macro. This is an IMS system error.

System Action: IMS terminates abnormally.

Programmer Response: This is an IMS internal error. For information, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

Problem Determination: 4, 35.

Register 15 contains the return code from (E)STAE.

0027

Explanation: While processing a DFSDUMP request, the IMS dump service routine received a system or IMS abnormal termination request. This abend is issued after the dump process is complete to force normal IMS recovery and termination. The reason code field in the first line of message DFS629I contains the original abend code.

System Action: The error is passed to the normal IMS recovery routines, the current DFSDUMP request is forced to TERM=YES, and a software LOGREC entry is requested for the original termination request.

Programmer Response: To analyze the original abend referred to by abend U0027, use both the LOGREC entry for the original abend and the dump in progress when the original abend was deferred.

0028

Explanation: The IMS control region terminated because the ABDUMP keyword was included in the `/CHECKPOINT` command.

This abend is a result of a `/CHE FREEZE`, `PURGE`, or `DUMPQ ABDUMP` command.

System Action: IMS issues the abend, produces a dump, and terminates normally.

Programmer Response: Determine the reason why the operator specified the DUMP option to the /CHECKPOINT command.

Problem Determination: None.

0029

Explanation: This is a standard abend issued by DL/I subordinate address space initialization. Refer to *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis* for details on the various conditions which cause this abend to be issued.

Reason Code	Description
81	An error return code was returned from DFSBCB GET indicating that SAVEAREA could not be got during initialization. Module: DFSXDT10
82	An error return code was returned from DFSCDSP indicating that dispatcher work area could not be created. Module: DFSXDT10
83	During initialization, an error return code was returned from IMODULE LOAD indicating that the tracking module cannot be loaded. Module: DFSXDT10
84	During initialization, an error return code was returned from DFSCWU indicating that the tracking ITASK could not be created. Module: DFSXDT10
85	During initialization, an error return code was returned from IMODULE GETMAIN indicating that storage could not be obtained in subpool 0 for the DFSXDT10 work area. Module: DFSXDT10
86	During initialization, an error return code was returned from IMODULE GETMAIN indication that storage could not be obtained in subpool 0 for the termination ITASKs. Module: DFSXDT10
87	During initialization, an error return code was returned from DFSBCB GET indicating that storage could not be obtained for the save area needed by the termination ITASKs. Module: DFSXDT10
88	During initialization, an error return code was returned from DFSCIR indicating that termination ITASKs could not be created. Module: DFSXDT10

System Action: The DL/I subordinate address space region terminates with abend U0029, causing the control region to abend with a U150.

Programmer Response: Refer to *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

0031

Explanation: While trying to locate a block in error on one log data set, CSECT DFSFLTP0 returned a nonzero return code in register 15.

System Action: Module DFSULG20 terminates abnormally with a dump.

Programmer Response: Refer to *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis* and check the return code in register 15.

0032

Explanation: A log sequence error was detected by the Log Recovery utility.

System Action: The Log Recovery utility issues abend 0032.

Programmer Response: Make sure that the order of the log data sets in the JCL is correct. If the order is correct, correct the log data set using the DUP and the REP modes of the Log Recovery utility. Then rerun the job.

0034

Explanation: Module DFSSCBT0 or DFSBCB30 was entered to get or release the VTCB, VLQB, or CBTS latch. In the case of a get-latch request, the common latch manager module DFSCLM00 returned with a nonzero return code. In the case of a release-latch request, the common latch manager module DFSCLM10 returned with a nonzero return code.

System Action: IMS terminates abnormally with abend U0034.

Programmer Response: Abend U0034 is identical to abend U0780 issued by the common latch manager (DFSCLM00 and DFSCLM10). See ABENDU780 in *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis* for the explanation of the abend subcode found in register 15.

0035

Explanation: A phase 1 sync point call failed in a Database Control (DBCTL) subsystem.

System Action: DBCTL terminates the unit of recovery, backing out any database changes.

Programmer Response: See the SNAP dump produced by the Database Resource Adapter (DRA). This dump contains the DRA Architected Parameter List (PAPL) and other diagnostic information.

Problem Determination: 38

0036

Explanation: An unexpected posting of a VTAM RPL resulting from either a VTAM, IMS logic error, or both occurred.

System Action: IMS terminates abnormally.

Master Terminal Operator Response: Save the pertinent information for the IBM Support Center, and restart IMS.

Problem Determination: 4, 5, 6, 11, 14, 35

0037

Explanation: A takeover request from the XRF alternate system to the IRLM failed. Register 15 contains the return code, and field RLPFCODE in the IRLM parameter list contains the reason code.

System Action: IMS terminates abnormally.

Programmer Response: Correct the error and restart the IMS alternate system.

Problem Determination: 1, 4, 10, 35

0038

Explanation: An attempt to release the locks at the completion of an emergency restart, or database back out execution, resulted in a bad return code from the IRLM. These locks are the locks held by the subsystem from the previous execution. Register 15 contains the return code from the IRLM. Refer to the PURGE request explanation in “PURGE Request” on page 451 to determine the cause of the failure.

System Action: IMS terminates abnormally.

Programmer Response: Correct the problem determined by the return code and restart IMS.

Problem Determination: 1, 4, 10, 35

0039

Explanation: An IDENTIFY request was issued to the IRLM, and the request failed. The return code is contained in register 15, and the reason code is located in the IRLM parameter list field RLIFCODE (offset X'8F'). Refer to the IDENTIFY request in “IDENT Request” on page 447 to determine the cause of the failure.

System Action: IMS terminates abnormally.

Programmer Response: Ensure that the subsystem name (IMSID or JOBNAME) is not currently being used by another active IMS subsystem and that the IRLM has been started and is active for this system.

Problem Determination: 1, 4, 10, 35

0040

Explanation: The acquisition of the global command lock resulted in an invalid return code. This lock is used and required for communication between all sharing subsystems.

System Action: IMS terminates abnormally.

Programmer Response: Ensure that the IRLM is still active.

Problem Determination: 1, 4, 10, 35

0041

Explanation: A signon request to DBRC failed. The DBRC return codes define the error. Refer to “DBRC Request Return Codes” on page 392 to determine the cause of the failure.

System Action: IMS terminates abnormally.

Programmer Response: Ensure that the online subsystem name IMSID or batch job name was correctly specified in the start-up procedure, and that the proper RECON data set was allocated to the IMS subsystem. If you are restarting the IMS alternate subsystem, issue the DBRC command `CHANGE.SUBSYS SSID(name) NOBACKUP`. This command resets the flags that indicate the alternate subsystem has signed on.

0042

Explanation: Backout was required for this startup and the DBRC signon request indicated that an entry did not exist for this subsystem. It is necessary to establish the same environment during an emergency restart.

System Action: IMS terminates abnormally.

Programmer Response: Ensure that the subsystem name IMSID or DBRC= has been properly specified in the startup procedure and that the proper RECON data set has been allocated to the IMS subsystem.

Problem Determination: 1, 4, 10

0043

Explanation: A signon request for "recovery end" was issued to DBRC, and the request failed. This request is issued after the initial checkpoint at the end of emergency restart and notifies DBRC of emergency restart completion. This allows DBRC to remove any pending information held from the previous execution of IMS. The DBRC return codes specify the error. Refer to “DBRC Request Return Codes” on page 392 to determine the cause of the failure.

System Action: IMS terminates abnormally.

Programmer Response: Determine the cause of the error and correct the problem.

Problem Determination: 1, 4, 10, 35

0044

Explanation: A normal or emergency restart was specified, and DBRC was not active. The DBRC name or subsystem name was not the same as that found on the X'4001' checkpoint record.

If you are using HALDB partitioning, this abend indicates that DBRC is not active when it is required. Message DFS0415W, with a reason code of X'74', precedes the abend.

Programmer Response: Ensure that DBRC is present for this execution and that DBRC=N was not specified. The same environment used in the previous execution, namely utilization of DBRC, must be used in this environment for emergency restart and database backout. Validate the input tapes for this execution or the correctness of the checkpoint value specified in the restart command.

System Action: IMS terminates abnormally.

Problem Determination: 1, 4, 10

0045

Explanation: The previous execution of IMS had utilized IRLM, but the IRLM was not present for this execution. For emergency restart, it is required that the same IRLM be present for this execution if it was present during the previous execution.

System Action: IMS terminates abnormally.

Programmer Response: Ensure that IRLM=N was not specified or that the same environment used by the previous execution of IMS exists for this execution.

Problem Determination: 1, 4, 10

0046

Explanation: One of the DB PCBs contained in the PSB, which appears in the third positional operand of the PARM field on the EXEC control statement, had an incompatible PROCESSING INTENT with the ACCESS parameter defined in the DATABASE macro statement for IMS system definition. The PROCESSING INTENT is derived from the PROCOPT operand specifications in the PSBGEN.

System Action: Error message DFS046A is issued. The batch region terminates abnormally. Dependent regions continue processing with limited access to the database.

Programmer Response: One of the following responses can be taken:

- Contact the master terminal operator to change the database ACCESS parameter to the level compatible with your PROCESSING INTENT
- change the PROCOPT operand specifications to the level compatible with the ACCESS parameter defined in the DATABASE statement for the IMS system definition.

Rerun ACBGEN, and then rerun the job.

Problem Determination: 6, 10, 19

0047

Explanation: One of the DB PCBs in the named PSB, appearing in the third positional operand of the PARM field on the EXEC control statement, had referenced the database and failed to obtain the database authorization through DBRC, or failed to obtain a larger work storage area in which to build the database authorization request list during the PSB scheduling.

System Action: Error message DFS047A or DFS049I is issued and the database is stopped. The batch region terminates abnormally. Dependent regions continue processing, but access to the database is prohibited.

Programmer Response: See error message DFS047A or DFS049I in *IMS Version 9: Messages and Codes, Volume 2* for the reason for the failure and the response to the failure. For message DFS047A, one of the following responses should be taken: 1) Contact the master terminal operator to close the database in other IMS subsystems that had held the database authorization by entering a `/DBR` command; or 2) wait until another IMS subsystem that had held the database authorization has terminated, and rerun the job.

Problem Determination: 11, 19

0048

Explanation: An error occurred during initialization of Database Recovery Control (DBRC). The return code is in register 15. For the meaning of the code, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: IMS terminated abnormally.

Programmer Response: Take appropriate action according to the error code described in *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

Problem Determination: 1, 2, 3, 4, 8, 12

0049

Explanation: This abend is issued when an out-of-storage condition occurs, which can only occur when using the IRLM. It indicates that an IRLM failure or an IRLM communication failure has occurred.

System Action: IMS terminates abnormally.

Problem Determination: 4, 12, 35

0050

Explanation: An IMS services request required for external trace initialization received an unexpected nonzero return code.

- Register 2 identifies the IMS services request that failed.

  Code (Hex) **Meaning**

  01 DFSBCB for QSAV request failed.

  02 DFSCDSP request failed.

  03 DFSCWU request failed.

  04 IMODULE request failed.
- Register 14 is the address where the error is detected.
- Register 15 contains the return code from the failing service.

System Action: The external trace TCB abends. Only OLDS external tracing is permitted until IMS is restarted.

0056

Explanation: An error occurred in a Database Control (DBCTL) subsystem while Fast Path was trying to access buffers for a Coordinator Controller (CCTL) request. This error can occur during a CCTL identify, terminate, thread schedule, or thread sync point request.

System Action: If the failure occurs during a schedule or sync point request, the IMS control region abends with U0056. Sync point errors occur after the phase 2 abort or commit.

If the failure occurs during an identify request, the identify request fails with pseudoabend U0056, but IMS and the CCTL are unaffected. A snap dump is created.

If the failure occurs during a terminate request, the terminate request fails with pseudoabend U0056, but IMS and the CCTL are unaffected. A snap dump is created. The CCTL is no longer identified to IMS, but its FP buffers are not released.

Programmer Response: See *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis* to determine which type of request failed.

If schedule or sync point failed, an internal error occurred.

If identify failed, IMS probably does not have enough FP buffers to satisfy the number of buffers requested. See CCTLNBA in the DRA startup table to determine how many buffers you requested.

If terminate failed, an internal system error or a storage shortage problem probably occurred.

Problem Determination: 1, 4, 38

0069

Explanation: A recursive IRC entry was detected by program DBFIRC10 or DFSDCPY0, or Fast Path (FP) was unavailable, and a call to Fast Path was found by DBFIRC10. The error subcode is in register 15.

Code	Meaning
4	Recursive entry to inter-region communication (IRC) occurred.
8	Fast Path was unavailable, and a Fast Path call was detected.

System Action: The dependent region is terminated abnormally. Other dependent regions and the IMS control region continue running.

Programmer Response: Reason code 4 is a user error. Ensure that a user STAE is not issuing an IMS call or an MVS STAE retry, and then issuing a call. Other reason codes should be treated as IMS system errors.

Reason code 8 should have been preceded by message DFS2768W, and an error occurred at IMS startup time. Examine the console log for errors during IMS start for the original error, such as message DFS2713I or message DFS2718I. Any application making calls to Fast Path will be terminated with this abend until IMS is restarted.

Problem Determination: 1, 5, 6, 11, 35

0070

Explanation: An IMODULE failure occurred.

Register 15 contains a return code from the IMODULE function. For a description of the IMODULE return codes, see Appendix C, “IMS System Services Return Codes,” on page 571.

Register 15 (bytes 0 and 1) might contain a second return code from the DFSBCB GET function. For an explanation of the DFSBCB return code, see Appendix C, “IMS System Services Return Codes,” on page 571.

ABENDU0070 is a standard abend that is issued by the Fast Path emergency restart module, DBFNRST0. The PSW (program status word) at entry-to-abend points to the instruction where the abend was issued. See *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

If you are using HALDB partitioning, this abend indicates either:
- Allocation of storage for control block DFSPCA fails.
- Loading of partition support modules fails. If this module is DFSDT150, message DFS0415W with reason code X'45' precedes this abend. If it is a module other than DFSDT150, no message precedes this abend.

System Action: IMS terminates abnormally.

Programmer Response: Take appropriate action according to the error code indicated above.

Problem Determination: 1, 4, 11, 35

0071

Explanation: During system initialization or subsequent execution, an error occurred in a lower-level module, which might cause one of several messages to be issued before this abend. Refer to the messages issued before this abend from either the DBRC region or the control region.

A common cause of this abend is a failure to close the OLDS logs before doing an `/ERE COLDSYS` start.

For further explanation, refer to *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: IMS terminates abnormally.

System Operator Response: Emergency restart IMS to resume processing.

Problem Determination: 1, 4, 15, 35

0072

Explanation: There was a nonzero return code from a DEVTYPE or TRKCALC macro issued for a log data set. The ddname might have been IEFRDER or IEFRDER2 for IMS batch, or DFSOLPnn, DFSOLSnn, or DFSWADSn for IMS online.

System Action: IMS terminates abnormally.

Programmer Response: Make sure there is a valid DD statement defining the log data sets. Make sure DASD devices are specified for the online log data sets, OLDS, and for the write-ahead data sets, WADS. Make sure the same DASD device type is specified for all WADS.

Problem Determination: None.

0073

Explanation: An insufficient number of valid log data sets exists at online initialization or restart time. IMS online requires at least 3 online log data sets (OLDS) and 1 write-ahead log data set (WADS).

If DBRC is not active, the required IEFRDER DD statement was missing.

If DBRC is active, either the IEFRDER DD statement was missing or was specified as DD DUMMY OR DSN=NULLFILE (null data set). Register 15 contains a reason code. For the meaning of the code, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: IMS terminates abnormally.

Programmer Response: Rerun the job with sufficient valid DD statements for the required log data sets.

Problem Determination: None.

0074

Explanation: A nonzero return code for the RDJFCB macro was issued for the system log or the monitor log.

System Action: IMS terminates abnormally.

z/OS System Operator Response: Contact your IMS system programmer.

Problem Determination: 4, 35

0075

Explanation: Initialization of the IMS log detected an invalid log device characteristic. On a tape device, the IMS batch system log must have a standard label or a standard user label. The IMS OLDS must be on direct access devices. Both the primary and secondary OLDS in a dual pair must be on the same device type. All the Write-Ahead Log Data sets must be on the same direct access device type.

System Action: IMS terminates abnormally.

Programmer Response: Correct the DD statements for the log data sets, and rerun the job.

Problem Determination: None.

0076

Explanation: This abend is issued for coupling facility services by either control address space or DL/I subordinate address space initialization. Register 3 contains the abend reason code. Register 15 contains the return code from the system service that found the error (for example, IMODULE). See *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis* for details on the conditions that cause this abend to be issued.

System Action: IMS terminates abnormally.

Programmer Response: See *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

Problem Determination: 1, 4, 35

0077

Explanation: A DELETE failure occurred during initialization.

System Action: IMS terminates abnormally.

Problem Determination: 4, 35

0078

Explanation: This abend results if the control block modules (load module DFSBLK00, PI control block module DFSFXC00, or OTMA control block modules DFSYINI0 and DFSYIMI0) could not be loaded during control region initialization. The last character of the module name is the suffix of the IMS system, determined by the SUF parameter of the startup procedure. For additional information, see the *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis* manual.

If this abend is preceded by one or more occurrences of message DFS1921I, check the syntax of the DFSPBxxx member. For information on specifying PROCLIB members, see the *IMS Version 9: Installation Volume 2: System Definition and Tailoring* manual.

System Action: IMS terminates abnormally.

Problem Determination: 35

0079

Explanation: This abend occurs if the IMS nucleus, load module DFSVNUCs or DFSCNUCs (s=suffix of the IMS system), could not be loaded during control region initialization. Register 15 contains the return code from IMODULE LOAD. For a description of these return codes, see Appendix C, “IMS System Services Return Codes,” on page 571.

System Action: IMS terminates abnormally.

Problem Determination: 35

0080

Explanation: An error occurred during execution of OSAM OPEN/CLOSE/EOV processing. This abend will also occur when module DFSA0S10 has received a request to schedule E0V processing for a DASD data set, but has found that E0V processing is already in progress for that data set.

System Action: IMS terminates abnormally.

z/OS System Operator Response: Restart IMS and call your IMS system programmer for assistance.

Problem Determination: 2, 3, 4. Obtain a dump showing both the module and the work area. If necessary, change the dump parameters or use a SYSABEND statement to obtain the above information.

0081

Explanation: The IMS IMSAUTH SVC BLDSSCT function was unable to build the subsystem control table (SSCT). Register 14 contains the address of the program invoking the abend. Register 15 contains the IMSAUTH BLDSSCT return code. For a description of these return codes, see Appendix C, “IMS System Services Return Codes,” on page 571.

System Action: IMS initialization terminates abnormally.

Programmer Response: If the caller is not authorized, make sure that the JOB or STEP libraries are authorized and DFSPCC30 is link-edited with the re-enterable (RENT) attribute.

Problem Determination: 1, 4, 8, 35

0083

Explanation: This abend occurs when ABEND is appended to message DFS1920I. The execution parameter was set with a bad value. This type of error is unrecoverable for the following IMS control region execution parameters:

- TRN
- SGN
- RCF
- ISIS

System Action: IMS terminates abnormally.

Programmer Response: Correct the parameter and error and rerun IMS.

0084

Explanation: A batch message processing (BMP) program tried to access an undefined data set.

0085

Explanation: The Message Format data set (ddname FORMATA or FORMATB) directory block that was read online conflicts with the directory block that was read at IMS initialization.

System Action: IMS terminates abnormally.

Programmer Response: Make sure that the Message Format data set will not be updated while IMS is active. Determine whether the format library is shared between processing units. Verify that active format library is a PDS file. PDS-E is not supported for Message Format data sets in IMS.

Master Terminal Operator Response: Emergency restart IMS to resume processing.

Problem Determination: 8,11

0088

Explanation: Initialization for the Local Storage Option failed.

System Action: IMS terminates abnormally.

System Operator Response: Probably an IMS internal error. Contact your system programmer for help. Refer to *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

Problem Determination: 1, 2, 3, 4, 8, 12, 35

0090

Explanation: An IMS internal post failed. A CLB, which was waiting for a format block, could not be posted.

Register 8 contains the CLB address. Register 10 contains the FRE address where FRE+0 has the format block name.

System Action: IMS terminates abnormally.

Master Terminal Operator Response: Emergency restart IMS to resume processing.

Problem Determination: 1, 11, 35

0092

Explanation: An IMODULE GETMAIN request for storage in the private or extended private area of the IMS control region was not successful.

System Action: The IMS control region terminates abnormally.

Programmer Response: For a description of IMODULE GETMAIN return codes, see “IMODULE Return Codes” on page 571. For storage allocation errors, increase the size allocated to the private or extended private area and restart IMS.

0095

Explanation: An error occurred while initializing the Logon, User, and MSC descriptors. This error is unrecoverable. See message DFS3658, which was issued before the abend, for the reason for the failure.

System Action: IMS terminates abnormally with a dump.

System Programmer Response: See the response for message DFS3658.

Problem Determination: See the problem determination for message DFS3658.

0097

Explanation: The VSAM DLVRP macro request to delete the VSAM local resource pools failed.

System Action: IMS terminates abnormally.

Programmer Response: The VSAM return code is in register 15. For an explanation of the return codes from the VSAM DLVRP macro, see *DFSMS/MVS Macro Instructions for Data Sets*.

Problem Determination: 4, 35

0098

Explanation: IMS issues this abend when it cannot find the user edit routine name in the user edit routine address table.

System Action: IMS terminates abnormally with a dump.

System Programmer Response: Ensure that the terminal descriptors describe the same user edit routines that were in effect before the restart.

Problem Determination: 1, 4, 35

0101

Explanation: An error occurred during Java dependent region processing. For module and register information, see the *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: The dependent region is terminated abnormally unless the abend is issued by DFSPCJM0 with a reason code of 3 or 4.

Programmer Response: For all instances of this abend, examine the dependent region job output for the cause of the failure by searching on the character string `DFSJVM00:`.

Module: DFSRCJB0, DFSRCJM0, DFSPCJB0, DFSPCJM0

0102

Explanation: An error was detected in doing the positioning for an extended restart.

For additional information, see message DFS1000I in *IMS Version 9: Messages and Codes, Volume 2* and ABENDU0102 in *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: The program terminates abnormally.

System Operator Response: Determine the cause of the error, correct the problem, and rerun the job.

0103

Explanation: The length field for one of the user areas pointed to by the parameter list for the CHKP call is either zero or negative.

System Action: The application program terminates abnormally.

Programmer Response: Check the length fields for the user areas that you have specified in the parameter list for the CHKP call. If one is found to be invalid, change it and rerun the job. See ABENDU0103 in *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

Problem Determination: 2, 3, 11

0106

Explanation: IMODULE LOAD for the Environment Controller (DFSECP10 or DFSECP20) failed with a nonzero return code. This is a standard abend issued by module DFSPCC20. Register 15 contains the return code. For a description of the IMODULE LOAD return codes, see “IMODULE Return Codes” on page 571.

System Action: The application program terminates abnormally.

Programmer Response: Correct the error and restart IMS.

Problem Determination: 4

0107

Explanation: Resource access security initialization encountered a problem. The hexadecimal error subcode in register 15 indicates why the initialization failed. For a description of these subcodes, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: The application program terminates abnormally.

Programmer Response: Correct the error and restart IMS.

0108

Explanation: A timer request failure occurred during an LU 6.2 shutdown. The LU 6.2 shutdown is not completed and is unable to proceed. DFSTIMER has returned with a bad return code.

System Action: The shutdown is terminated abnormally.

Programmer Response: Contact the IBM Support Center.

Problem Determination: 1, 5, 6, 8, 10, 27, 34, 36

0110

Explanation: A Coordinator Control (CCTL) subsystem issued an INIT call to connect to a Database Control (DBCTL) subsystem. The connection routines sent a request to the IMS control region to load the DBCTL modules, but the load request failed.

System Action: IMS terminated the connection process and issued message DFS697I.

System Programmer Response: See message DFS697I.

Problem Determination: 6, 8, 10, 38

0111

Explanation: A Coordinator Control (CCTL) subsystem issued an INIT call to connect to a Database Control (DBCTL) subsystem. DBCTL built a subsystem status index entry (SIDX) for this CCTL and tried to enqueue it to the SIDX chain, but the enqueue request failed.

System Action: IMS terminated the connection process.

System Programmer Response: Bring down the IMS control region with a dump and perform an emergency restart.

Problem Determination: 1, 4, 6, 11, 15, 35, 38

0112

Explanation: A Coordinator Control (CCTL) subsystem requested termination (purge) of a Database Control (DBCTL) subsystem thread.

System Action: IMS purged the thread and the thread TCB.

0113

Explanation: An IMS abend was detected while DL/I or DC was processing a call in a dependent region. The diagnostic area for the region causing this abend contains the program status word (PSW), general purpose registers, and a copy of the IMS-related blocks with eye-catchers at entry to the abend.

Note: If offline dump formatting is chosen, the dump will be taken during the dependent region abend processing and will show the dependent region abend code. The control region will then be terminated with abend U0113, but no additional dump will be taken unless the SDUMP was not successful. Analyzing dependent region SDUMPs is the same as analyzing other IMS SDUMPs.

System Action: The IMS control region terminates abnormally.

Master Terminal Operator Response: Emergency restart IMS to bring up the control region.

Problem Determination: 1, 4, 6, 14, 35. Do not submit an APAR if the abend was the result of MVS CANCEL, SMF JOB STEP TIMING, /STOP REGION CANCEL, or other user-initiated abends.

0114

Explanation: Abend U0114 is a standard abend issued by module DFSSCHR0. An IMODULE GETMAIN request failed to obtain the DFSSCHR work area.

System Action: The dependent region is terminated.

Programmer Response: Increase the region size and resubmit the job.

0118

Explanation: A Java application program in a JMP or JBP region did not explicitly commit before it attempted to terminate normally. A Java application program in a JMP or JBP region must explicitly commit before terminating normally.

System Action: The application program terminates abnormally. The program and transaction (if JMP) are put in STOP status.

Programmer Response: Modify the application program so that it calls the `IMSTransaction.getTransaction().commit()` method before the application program terminates. Start the application and transaction before rerunning the application program.

0119

Explanation: An LU 6.2 session failure occurred on an LU 6.2 synchronous conversation or a SEND failure occurred on an OTMA SEND-THEN-COMMIT transaction for the following reasons:

- The User Destination Exit abended the transaction instead of sending the output message asynchronously.
- A User Destination Exit was not provided. This abend code is used to abort the transaction. The program and transaction are not stopped.
- The TPIPE on which the reply is to be sent is stopped.
- OTMA is stopped.
- The OTMA client has left the XCF group.

System Action: If the abend is issued for an LU 6.2 session failure, the shutdown continues normally. For an OTMA error, both the incoming SEND-THEN-COMMIT message to IMS, and the REPLY message to the client are lost.

Programmer Response: Determine the cause of the session or SEND failure.

Problem Determination: 1, 5, 6, 8, 10, 27, 34, 36

0120

Explanation: An error was detected by module DFSXNCL0 while loading the IMS nucleus. The error is one of the following:

- When DFSXNCL0 loads the IMS nucleus, it performs a validity check on the IMS product number stored within the nucleus. The nucleus product number must match the product number stored within DFSXNCL0. This check is to ensure that the IMS nucleus was built using the same IMS release macros as the IMS that is executing. If the nucleus product number does not match, then DFSXNCL0 issues an ABENDU0120. Register 15 at abend will be zero for this case. You must ensure that the IMS system definition is done with the IMS macro libraries for the IMS release that you are executing.
- When IMS Fast Path is installed, DFSXNCL0 performs address resolution on the SCD extensions. If an SCD extension cannot be located (if the LOCESCD service fails), then DFSXNCL0 issues an ABENDU0120. Register 15 at abend will be non-zero, and will point to the address of label XNCLABND within module DFSXNCL0.

System Action: The IMS control region terminates abnormally.

Problem Determination: 4, 35

0121

Explanation: When the IMS control blocks module (DFSBLK00) was loaded, the SCD (CSECT DFSISCD) was not the entry point, as required. The probable cause is user modification of the linkage editor control statements.

System Action: IMS terminates abnormally.

Programmer Response: Rebind DFSBLK0x with the correct entry point.

0123

Explanation: A deadlock condition that cannot be retried was detected while an IMS database call for a modified standard DL/I program was being processed. The modified standard DL/I program had allocated at least one LU 6.2 conversation when the deadlock condition was detected. This abend is similar to abend U0777, but cannot be retried; the input message is discarded. CPI communications driven programs cannot be retried.

System Action: The modified standard DL/I program terminates abnormally, and the input message is discarded.

Programmer Response: Reenter the transaction.

0124

Explanation: A U2478 condition that cannot be retried was detected while an IMS database call for a modified standard DL/I program was being processed. The modified standard DL/I program had allocated at least one LU 6.2 conversation when the number of PI waiters exceeded 63. This abend is similar to abend U2478, but cannot be retried; the input message is discarded. CPI communications driven programs cannot be retried.

System Action: The modified standard DL/I program terminates abnormally and the input message is discarded.

Programmer Response: Reenter the transaction.

0125

Explanation: A LOCK REJECT condition that cannot be retried was detected while an IMS database call for a modified standard DL/I program was being processed. The modified standard DL/I program had allocated at least one LU 6.2 conversation when the lock reject occurred. This abend is similar to abend U3303, but cannot be retried; the input message is discarded. CPI communications driven programs cannot be retried.

System Action: The modified standard DL/I program terminates abnormally and the input message is discarded.

Programmer Response: Reenter the transaction.

0126

Explanation: A U2479 condition that cannot be retried was detected for a modified standard DL/I program. The modified standard DL/I program had allocated at least one LU 6.2 conversation when IMS detected that insufficient storage exists for a Buffer Queue Element (BQEL). This abend is similar to abend U2479, but cannot be retried; the input message is discarded. CPI communications driven programs cannot be retried.

System Action: The modified standard DL/I program terminates abnormally, and the input message is discarded.

Programmer Response: Reenter the transaction.

0127

Explanation: An SAA® communications driven program terminated with IMS resources in a noncommitted state. This condition occurs when the CPI communications driven program fails to issue CPI-RR COMMIT(SRRCMIT) or BACKOUT(SRRBACK) calls before terminating. IMS attempted to perform an implicit commit but the commit failed. CPI communications driven programs cannot be retried.

System Action: The program terminates abnormally.

Programmer Response: Ensure the resources are recovered.

0128

Explanation: An APPC/MVS ASSOCIATE call failed. An ASSOCIATE call informs APPC/MVS where the LU 6.2 conversation is processed.

System Action: The program terminates abnormally. The input message is requeued for scheduling, and the conversation is changed to asynchronous.

Programmer Response: Reenter the transaction.

0129

Explanation: A RACF® or equivalent call to create a copy of an ACEE failed. A RACF call establishes the security environment for the dependent region.

System Action: The program terminates abnormally. The input message is discarded from the system if RACF or equivalent indicates an actual security violation. If the input message has been discarded, the DFS554A message will indicate that neither the transaction nor the program was stopped. If the input message is put back on the message queue (for example, RACF or equivalent is not active), the DFS554A message will indicate that both the transaction and program were stopped.

Programmer Response: Ensure RACF or equivalent is available and start the transaction.

0130

Explanation: An MPP region attempted to connect to a DBCTL region. The attempt is invalid because DBCTL does not allow a connection from MPP regions.

System Action: The MPP receives pseudoabend U130.

Programmer Response: Do not start an MPP that attempts to connect to an IMSID that is associated with an active DBCTL region.

0131

Explanation: In the identify function of DFSASK00, a nonzero return code was returned from an IMODULE GETMAIN request for SP230 storage for DFSSRB.

System Action: The dependent region is terminated.

Problem Determination: 4, 35

0132

Explanation: Nonzero condition code following a store clock, STCK, instruction during IDENTIFY. Originating module is DFSASK00.

System Action: The dependent region is terminated.

Programmer Response: Refer to *System 370 Principles of Operation* for the store clock, STCK, failure return code.

Problem Determination: 4, 35

0134

Explanation: Dependent region issued an IDENTIFY request when the control region shutdown was in progress.

System Action: The dependent region is terminated.

Problem Determination: 4, 35

0135

Explanation: Invalid request code passed to DFSASK00.

System Action: The dependent region is terminated.

Problem Determination: 4, 35

0136

Explanation: A second IDENTIFY request was issued from the same dependent region.

System Action: The dependent region is terminated. For a Database Control (DBCTL) subsystem, the Coordinator Control (CCTL) subsystem connection process is terminated.

Problem Determination: 4, 35

0137

Explanation: A Coordinator Control (CCTL) subsystem issued a second IDENTIFY while the cleanup for the previous connection was still in progress. The same ASCB address or the same CCTL ID detected the error. To determine which one detected the error, examine the SSPSCODE field of the SSOB. This field will contain either 'NAME' or 'ASCB'.

System Action: The connection process is terminated.

System Programmer Response: Wait until the cleanup completes for the previous connection before attempting another connection. You can use the `/DIS` CCTL command to check the CCTL status. Refer to *IMS Version 9: Command Reference* for information about using the command.

Problem Determination: 1, 5, 8, 38

0138

Explanation: A Coordinator Control (CCTL) subsystem issued an INIT request. The Database Resource Adapter (DRA) loads a module that is called to notify the DRA about DBCTL events such as DBCTL abending, DBCTL terminating normally (/CHE FREEZE), or /STOP REGION commands for DRA threads. DBCTL was unable to locate the DRA notification module.

System Action: The CCTL INIT request is rejected.

Programmer Response: Verify that the library defined in the DRA startup table includes all of the DRA modules.

0139

Explanation: An error return code was received from the SYSEVENT SVC.

System Action: The dependent region is terminated.

Problem Determination: 4, 35

0140

Explanation: The IDENTIFY token is not valid. This abend is also issued if a dependent region is not found in the PST ID table while making a DL/I call.

System Action: The dependent region is terminated.

Problem Determination: 4, 35

0141

Explanation: The signon token was not valid.

System Action: The dependent region is terminated.

Problem Determination: 4, 35

0142

Explanation: The work unit blocks assigned to the dependent region could not be created. The storage for the dependent PST was not available.

This abend can also occur when the MAXPST is reached.

System Action: The dependent region is terminated. A signon ISI request was not done.

System Programmer Response: Allocate additional subpool space.

Problem Determination: 4, 35

0143

Explanation: Insufficient virtual storage was available for dependent region initialization.

System Action: The dependent region is terminated.

Programmer Response: Increase the region (partition) size and resubmit the job.

0144

Explanation: A dependent region IDENTIFY request failed, probably because the storage request for the IDENTIFY table failed. No IDENTIFY table is available.

Programmer Response: Increase the region (partition) size and resubmit the job.

System Action: The dependent region is terminated.

Problem Determination: 4, 35

0145

Explanation: The caller of DFSASK00 is not a valid caller. During the processing of a call, either the identify token passed on the call did not match that in the IDT, or the caller was not in the same address space as the identifier.

System Action: The dependent region is terminated.

Problem Determination: 4, 35

0147

Explanation: A SIGN-OFF request was received while one or more threads were still active. SIGN-OFF issued a TERMINATE THREAD.

System Action: The dependent region is terminated.

Problem Determination: 4, 35

0148

Explanation: Abend U0148 is a standard abend issued by module DFSASK00. A nonzero return code was returned in response to an IMODULE GETMAIN or a QSAV request during dependent region termination (SIGN-OFF processing).

System Action: The IMS dependent region terminates abnormally.

Problem Determination: 4, 35

0149

Explanation: An ISWITCH to the control region failed. This is a pseudoabend established by DFSASK00.

System Action: The dependent region is terminated.

System Operator Response: If a `/STOP REGION ABDUMP` command was not entered for the abended region contact the IMS systems programmer.

Programmer Response: For more details, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

Problem Determination: 4, 35.

0150

Explanation: When either the DBRC region, the DL/I subordinate address space region, or the IMS control region abnormally terminates, the other regions are terminated with abend U150.

System Action: IMS, DBRC, and DL/I subordinate address space terminate abnormally.

Programmer Response: Provide a dump of the DBRC, DL/I subordinate address space, and IMS control regions.

0151

Explanation: The //DFSCTL data set has invalid data set attributes. Message DFS1071I is issued along with this abend.

System Action: The application program terminates abnormally.

Programmer Response: Correct the data set attributes based on information in message DFS1071I.

0152

Explanation: The Sequential Buffering (SB) COMPARE option detected that the buffer content that the SB buffer handler wanted to return to the OSAM buffer handler did not match the content of the block as stored on DASD. Message DFS1070I is issued along with this abend.

System Action: The application program terminates abnormally.

Programmer Response: See message DFS1070I for the appropriate response.

0153

Explanation: IMS was unable to acquire storage for an area, or load an IMS system module. IMS issues message DFS1075A, DFS1076A, or DFS2347A before this abend to indicate the cause of the problem.

System Action: IMS terminates abnormally.

Programmer Response: Correct the error based on information in message DFS1075A, DFS1076A, or DFS2347A.

0154

Explanation: An unexpected interface error occurred between the OSAM access method and the Sequential Buffering (SB) buffer handler. A SNAP dump is written to the IMS log or to a user-designated data set.

System Action: The application program terminates abnormally.

Programmer Response: See *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis* for detailed diagnostic information.

0155

Explanation: The Sequential Buffering (SB) test program (DFSSBHD0) detected an error during execution.

Before terminating abnormally, the SB test program issues a message describing the problem, and places a reason code in the low-order byte of register 15. Each reason code corresponds to a message.

Code (Hex)	Message Number
00	DFS1080A
01	DFS1081A
02	DFS1082A
03	DFS1083A
04	DFS1084A
05	DFS1085A
06	DFS1086A
07	DFS1087A
08	DFS1088A
09	DFS1089A
0A	DFS1090A
0C	DFS1092A
0D	DFS1093A
0F	DFS1095A
13	DFS1099A
14	DFS2343A

System Action: IMS terminates abnormally.

Programmer Response: See the message that corresponds to the reason code for the appropriate response.

0156

Explanation: An application program made a DL/I call. The caller was in supervisor state.

System Action: The dependent region is terminated.

Problem Determination: 4, 35

0157

Explanation: An application program made a DL/I call. The caller was in a different key than the key in the TCB.

System Action: The dependent region is terminated.

Problem Determination: 4, 35

0158

Explanation: The GSAM initialization module, DFSZDI20, encountered a problem executing the type 13 RDJFCB macro to obtain DD statement information for GSAM data sets. For register content information, see ABENDU0158 in *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*. See *MVS/XA/Extended Architecture System- Data Administration Manual* for a description of the type 13 RDJFCB macro.

System Action: The IMS batch or BMP region terminates abnormally.

Programmer Response: Additional virtual memory is needed to execute the RDJFCB macro. Ensure that the size of the region is adequate.

0160

Explanation: An application that was not executing in an IMS dependent region issued a DL/I call, an SRRCMIT call, or an SRRBACK call. For more information, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: The application is terminated.

0166

Explanation: IMS security options specified RACF to be used for signon verification and command or transaction authorization or for RAS authorization, but IMS RACF security initialization either failed or is not present in the system.

System Action: IMS terminates abnormally.

System Operator Response: Activate RACF security for this IMS system.

Programmer Response: A code in register 15 at the time of ABEND identifies the cause of the failure in RACF initialization. If an error occurred on the RACF RACLIST call, register 5 will contain a value to indicate which class failed (4 - CIMS, 5 - TIMS, 6 - IIMS, and 7 - LIMS). See *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis* for the possible reason codes for the failure in RACF initialization.

0168

Explanation: One of the following errors occurred:

- The checkpointed blocks do not match the loaded blocks. This condition occurs if the user's IMS control block structure has been changed since the specified checkpoint was taken.
- A checkpointed CNT could not be found on a restart. This condition is the result of an IMS code failure.

System Action: IMS terminates abnormally.

Programmer Response: If the error is because checkpointed blocks do not match the loaded blocks, re-IPL IMS and either enter a checkpoint that reflects the current block structure, or cold start the system.

If the error is because a checkpointed CNT could not be found on a restart, contact the IBM Support Center.

Problem Determination: 4, 5, 10, 35, 36

0171

Explanation: This abend results if FORCE security is in effect. Loading of one or more of the security tables was requested but could not be loaded correctly. A return code in the DFS171A message indicates which security tables could not be loaded.

System Action: IMS terminates abnormally.

Using Terminal Operator Response: Contact your IMS system programmer for assistance.

Problem Determination: 1, 4, 8, and the output from the Security Maintenance utility.

0172

Explanation: There is insufficient space in the work area pool (WKAP) to satisfy restart work space requirements.

System Action: IMS terminates abnormally.

Programmer Response: Increase the size of the IMS work area pool (WKAP), and perform another restart.

0175

Explanation: Unrecoverable errors have been encountered while processing the input log during restart. Refer to messages DFS0739I and DFS0739X, which might be received before this abend.

System Action: IMS terminates abnormally.

Problem Determination: 1, 5, 8, 11, 35

Save a copy of the OLDSs and WADSs.

List the DBRC RECON data set.

0176

Explanation: While processing the input log during restart within an Extended Recovery Facility (XRF) complex, the IMS alternate system encountered errors from which recovery was impossible. Fast Database Recovery also issues this abend when it encounters errors. Refer to messages DFS0739I and DFS0739X, which might be received before this abend.

System Action: IMS terminates abnormally.

Problem Determination: 1, 5, 8, 11, 35

Save a copy of the OLDSs and WADSs.

List the DBRC RECON data set.

0181

Explanation: Duplicate data space tokens found. A new data space was acquired that has the same data space token as an existing data space.

System Action: The IMS control region abnormally terminates.

System Programmer Response: This should not occur and represents a z/OS error if it does.

Module: DBFVIDS0

0182

Explanation: A must-not-occur condition was detected in one of the Fast Path I/O modules. Register 15 contains the diagnostic code: bytes 0-2 contain the module ID and byte 3 contains the subcode.

Module ID `FOR` (DBFFORI0):

01 A process running at SYNCPOINT added a buffer on the output thread for which the write-must-complete state was not set. This condition should not occur.

02 Data Space unpin buffer after I/O failed

03 Data space I/O in process count does not match the number of VSO buffers being written

Module ID `MFL` (DBFMFL10):

01 The user's field search argument (FSA) for hexadecimal data field exceeds IMS I/O workarea.

02 The user's field search argument (FSA) for decimal data field exceeds IMS I/O workarea.

03 The user's field search argument (FSA) for data type is different than the hexadecimal or decimal and exceeds the IMS I/O workarea.

Module ID `MIO` (DBFMIOS0):

02 A process running at SYNCPOINT added a buffer on the output thread for which the

write-must-complete state was not set. This condition should not occur.

Module ID NCB (DBFNCBS0), the subcodes are:

01 The resource ID for the pre-allocated SDEP CI equals the current CI RBA or HWM CI RBA.

Module ID SRB (DBFMSRB0); the subcodes are:

01 DMAC does not support VSO

02 Data Space Control Block Structure is invalid

03 Area contained in Data Space Control Block structure is invalid

04 RBA requested is too large (GE SDEP portion of area)

Module ID MAI (DBFUMAI0):

01 The resource id for the pre-allocated SDEP CI equals the current CI RBA or HWM CI RBA.

Module ID VOC (DBFVOCI0); the subcodes are:

01 DSML (Data Space Map List) not passed by caller

02 Dummy DMHRs for write staging area not exist in DSML

03 No I/O, data space unpin failed

04 No DSML has completed I/O

05 After I/O completed, data space unpin failed

07 Address of L56X block in DSML DSMEL56X is zero

Module ID VSO (DBFVSOW0); the subcodes are:

01 The DMAC pointed to in the DMHR did not specify VSO

02 The DMAC and DSME pointers did cross check

03 The RBA in the DMHR was beyond the scope of the DSME

04 The block passed to DBFVSOW0 was not a DMHR

05 The return code from BCB was nonzero

System Action: The IMS control or dependent region abnormally terminates.

System Programmer Response: Call the IBM Support Center.

Module: DBFMSRB0, DBFVOCI0, DBFVSOW0, DBFMIOS0, DBFFORI0, DBFUMAI0, DBFNCBS0

0184

Explanation: IMS could not allocate a structure for long busy toleration in the coupling facility at startup.

System Action: IMS terminates abnormally.

Programmer Response: See message DFS15552A. Correct the problem and restart IMS. If the MADS I/O timing function is not required, delete the MADSIOT specification from the DFSVSMxx PROCLIB member and restart IMS.

0195

Explanation: A must-not-occur condition was detected in one of Fast Path modules. Reg13 is the address of a save area that contains registers at the time of abend if the module that detects the error saves the registers before issuing the abend. Reg15 contains the subcodes:

X'01' DBFARD30 detects that the number of areas in parameter list for authorized areas returned from DBRC is greater than 200.

X'02' DBFHSRT0 detects that there is no EMHB for output message ISRT and there is no INIT STATUS GROUP A or INIT STATUS GROUP B set.

System Action: The IMS dependent region or the IMS control region abnormally terminates, depending on the abend subcode.

System Programmer Response: Call the IBM support center.

Module: DBFARD30, DBFHSRT0

0200

Explanation: A GET type function was issued using the AIB interface that was expecting data to be returned in the I/O area. However, the length of the IO area was too small to receive the data.

System Action: The application program terminates abnormally.

Programmer Response: Increase the size of the I/O area to allow the data to be returned to the application.

0201

Explanation: One of the following situations may have occurred:

1. At least one HALDB input statement that was read and validated contained syntax errors. Message DFS3777A with a RC=04 or 08 is issued. A RC=04 could also indicate that there were no syntax errors but more than 10 statements were supplied.
2. Single partition processing in an IFP, JMP, or MPP region is not allowed. Message DFS3776A is issued.

3. DFSHALDB failed to open or its attributes are not valid. The LRECL might not be equal to 80 or the RECFM is not fixed block format. The corresponding message is DFS3775A.
4. There is not enough storage to continue processing. Message DFS3774A is issued and indicates a GETMAIN failure for the control block that appears in the message.

System Action: The job terminates abnormally in module DFSHSPI0 with one of the following reason codes:

Code	Message Number
04	DFS3777A RC=4
08	DFS3777A RC=08
12	DFS776A IFP/JMP/MPP
16	DFS3775A RECFM
20	DFS3775A LRECL
24	DFS3667A open failure of DFSHALDB
28	DFS3774A insufficient storage

Programmer Response: Take one of the following actions:

- For syntax errors, review the report in SYSHALDB. Correct the HALDB input statements and resubmit the job. If no syntax errors exist, limit the input to 10 statements and resubmit the job.
- For HALDB input statements that are supplied to DFSHALDB in an IFP, JMP, or MPP region, delete DFSHALDB or remove the input statements and resubmit the job.
- Investigate the attributes of the data set associated with DFSHALDB.
- Increase the size value of the REGION parameter.

Problem Determination: 1, 17h

Module: DFSHSPI0

0202

Explanation: For any of the statements whose syntax was successfully validated, the PCB number does not correspond to any DBPCB within the PSB or the partition name is not valid. The partition name could be either misspelled or it could be a valid name that cannot be found in the database referenced by the DBPCB number that was supplied. This abend is preceded by messages DFS3379E and DFS3779A.

System Action: Pseudoabend 0202 is issued from module DFSHSPP0

Programmer Response: Correct the invalid PCB number or partition name and resubmit the job.

Problem Determination: 1, 17b, 17h

Module: DFSHDPP0

0203

Explanation: While running the File Select and Formatting Print utility, DFSERA10, the parameter list constructed from the OPTION statements was found to have been modified. (Refer to the *IMS Version 9: Utilities Reference: System* for the format of the OPTION control statement.) An error might have occurred in the user exit routine (OPTION control statement, operand EXITR=), which caused the routine to address and modify storage outside the program's legitimate address space.

System Action: The program terminates abnormally.

Programmer Response: Correct any indicated errors, and rerun the job.

Problem Determination: 3, 4, 35

0204

Explanation: An attempt to open a data set defined by the TRCPUNCH DD statement failed.

System Action: The job terminates abnormally.

Programmer Response: Ensure that TRCPUNCH DD statement exists and is correct in the DFSERA10 input stream.

0206

Explanation: The IMS.PSBLIB or IMS.DBDLIB libraries could not be opened.

System Action: The IMS batch region terminates abnormally.

Programmer Response: Check the batch processing region JCL for the correct IMS ddnames. Correct the JCL in the DFSERA10 input stream, and resubmit the job.

Problem Determination: 2, 3

0209

Explanation: A region type of ULU or UDR was specified, but the DBD name specified was a logical DBD or the access method was invalid.

System Action: IMS terminates abnormally.

Programmer Response: Correct the JCL, and resubmit the job.

0210

Explanation: A CCTL subsystem issued an UNSCHEDULE call or a TERMINATE THREAD call to the DBCTL subsystem. DBCTL detected the unit of recovery with outstanding updates.

System Action: IMS terminates the thread abnormally and issues a DFS554 message. The updates are

backed out if the DBCTL thread is in flight. The updates are held if the DBCTL thread is in doubt.

System Programmer Response: See message DFS0554A and *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis* for additional information to correct the problem.

Problem Determination: 1, 3, 5, 33, 36

0214

Explanation: The parameter field specified a region type of ULU, UDR, DBB, or DLI. The program name supplied is not authorized to use this region type.

System Action: IMS terminates abnormally.

Programmer Response: Correct the JCL, and resubmit the job.

0215

Explanation: The IMS disk logical logger has encountered an internal error. Register 15 contains a return code. For the meaning of the code, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: IMS terminates abnormally.

System Operator Response: Emergency restart IMS to resume processing.

Problem Determination: 1, 3, 4, 5, 6, and 25

0216

Explanation: The Log Recovery utility (DFSULTR0) detected a bad return code from DBRC, and DBRC=YES was requested.

System Action: The Log Recovery utility terminates abnormally.

Programmer Response: Correct the DBRC problem or code DBRC=N on the EXEC statement to ignore DBRC.

System Operator Response: Contact your IMS system programmer.

Problem Determination: 1, 2, 3, 4, 8, and 25

0219

Explanation: The command processor detected an error that was unrecoverable or detected an invalid interface with a command action module.

System Action: IMS terminates abnormally.

System Operator Response: Note the activity on the terminal that caused the message, and contact your IMS system programmer for assistance.

Problem Determination: 1, 4, 5, 6, 35

0220

Explanation: IMS initialization of a LGEN system definition did not find a control block. See IMS message DFS3563I for the control block that was not found.

DFSIIRS0 is the module that issues the error message and the abend.

System Action: IMS terminates abnormally.

Programmer Response: Make sure the correct set of control blocks is being used from LGEN system definition.

Problem Determination: 1, 4, 10, 13, 35

0225

Explanation: The Database Image Copy 2 utility (DFSUDMT0) issues this abend when it determines that invalid information was received from DFSMSdss™. Register 15 contains a reason code that further identifies the problem. The utility also issues message DFS3144A, which identifies the database data set for which the problem occurred. The reason code for the abend is:

Code	Meaning
4	The output volume serial number from DFSMSdss is zeroes.

System Action: The Database Image Copy 2 utility (DFSUDMT0) continues processing for other database data sets if DFSMSdss is able to recover from the abend. The return code for the utility will be 8 or higher.

Programmer Response: Check ADR*nnn* messages issued by DFSMS to aid in diagnosis. See *z/OS MVS System Messages, Volume 1* for a description of ADR messages. If you cannot determine the solution, contact the IBM Support Center. Have the abend documentation available.

0230

Explanation: This abend is issued by module DFSRLP00 for these reasons:

- An `/ERE BLDQ` command was issued and the log used for restart reached EOF before the end of checkpoint record (4099) was read.
- During restart an attempt to get storage for a work area from the MAIN (WKAP) storage pool failed.

System Action: Abnormal termination of IMS.

Programmer Response: Specify an earlier checkpoint at which to restart IMS, or determine the cause of the error and rerun this execution.

Problem Determination: 1, 4, 5, 35

0231

Explanation: IMS was not able to resynchronize with the CQS subsystem. The abend subcode in register 15 provides the reason for the failure.

Subcode	Description
01	The operator replied ABORT to message DFS3909.
02	IMS received a return code other than 0 and 4 from CQS. This return code is provided in register 14 in the dump.
03	An attempt was made to warm or emergency start IMS with CQS, but CQS was not active in the prior IMS execution. A change in the usage of CQS can only be made during a cold start.
04	An attempt was made to warm or emergency start IMS without CQS, but CQS was active in the prior IMS execution. A change in the usage of CQS can only be made during a cold start.
05	An attempt was made to warm or emergency start IMS with a different CQS than was active in the prior IMS execution. A change of this type can only be made during a cold start.
06	An attempt was made to warm or emergency start IMS with a different CQS MSGQNAME than was used in the prior IMS execution. A change of this type can only be made during a cold start.
07	An attempt was made to warm or emergency start IMS with a different CQS EMHQNAME than was used in the prior IMS execution. A change of this type can only be made during a cold start.
08	An EMHQ structure was used in the previous IMS execution and no EMHQ structure is used in the current execution, or no EMHQ structure was used in the previous IMS execution and an EMHQ structure is used in the current execution. A change of this type can only be made during a cold start.

Module: DFSRLP00

0233

Explanation: IMS was not able to resume with the current resource structure usage. The abend subcode provides the reason for the failure:

Subcode	Meaning
01	An attempt was made to warm or emergency restart IMS with a resource structure, but the resource structure was not in use by the DC component of IMS in the prior IMS run. This change can only be made during a cold start of the DC component of IMS.
02	An attempt was made to warm or emergency restart IMS without a resource structure, but the resource structure was in use by the DC component of IMS in the prior IMS run. This change can only be made during a cold start of the DC component of IMS.

System Action: IMS terminates abnormally.

Programmer Response: Determine whether or not IMS should be using a resource structure, then determine whether the resource structure has been defined correctly to the Resource Manager. If IMS must change its use of the resource structure, cold start the Transaction Manager component of IMS.

Module: DFSRLP00

0240

Explanation: A message processing application program exceeded the allowable execution time (set at IMS system definition) in a message processing region. In the case of a BMP, this abend indicates that the value specified in "CPUTIME=" has been exceeded.

System Action: A storage dump is taken and the dependent region program controller is reattached. In the case of a BMP step, the step is terminated.

Programmer Response: Refer to the TRANSACT macro in *IMS Version 9: Installation Volume 2: System Definition and Tailoring*.

Problem Determination: 5, 14

Save the log data sets being used and the assembly listings of any user-modified IMS modules.

0242

Explanation: The DIRCA parameter (for BMPs) or PCB parameter (for MPPs) specifies a size that is too small to accommodate the PSB to be scheduled. This abend can also result from a Database Control (DBCTL)

internal error in building the DIRCA for a Coordinator Control (CCTL) thread.

System Action: The IMS dependent region terminates abnormally, and the program in progress stops.

Master Terminal Operator Response: Issue a /START command for the program, and contact your IMS system programmer for assistance.

Programmer Response: See the *IMS Version 9: Installation Volume 2: System Definition and Tailoring* for information on default DIRCA size and how it is calculated. Increase the DIRCA size specifications.

Problem Determination: 1, 2, 3, 4, 5, 6, 8, 9, 17b.

0243

Explanation: An APPC transaction has been timed out by IMS. The time-out value is specified in the APPCIOT=(,XX) parameter.

System Action: No dump is taken and the dependent region controller is reattached.

0249

Explanation: An invalid status code (not STATUSGA or status blank) is returned to the DL/I test program, DFSDDLT0, during its internal end-of-job status calls in a batch environment. The absence of VSAM buffers in the DFSVSAMP DD card results in a STATUSGE on the status call and causes ABENDU0249 to be issued from DFSDDLT0, if the ABU249 option is coded.

System Action: The application program is abnormally terminated.

Programmer Response: In the dump, locate PSTRTCDE to determine the cause of the error.

Problem Determination: 17a, 17b, 35

0250

Explanation: The DL/I test program, DFSDDLT0, issued a conditional GETMAIN macro for an area to be used for the segment I/O area. If running online, the size requested was 32732 bytes. If running in batch, the size was the maximum I/O length determined when the blocks were built for the PSB. The requested storage was not available.

System Action: The IMS dependent or batch region terminates abnormally.

Programmer Response: Provide a larger region size for the step and rerun the job.

Problem Determination: None.

0251

Explanation: The DL/I test program, DFSDDLT0, is unable to open one of the data sets used by this program. Unless it is the data set used by the PRINTDD statement, a message on the PRINTDD data set indicates the ddname of the data set that could not be opened.

System Action: The IMS dependent or batch region terminates abnormally.

Programmer Response: Provide a DD statement for the data set and execute the job again.

Problem Determination: 2, 3, 4, 20

0252

Explanation: The DL/I test program (DFSDDLT0) might issue this abend for the following reasons:

- An abend was requested by specifying ABEND in columns 1 through 5 on an input control card.
- An unknown return code was received after the STAT call was issued to gather statistics before termination.
- An unknown return code was received following a message ISRT call to the IMS message queue. No PRINTDD statement was present in the JCL for the job.

System Action: The IMS batch or dependent region terminates abnormally with abend U0252.

Programmer Response: If you requested the abend, the abnormal termination is expected. If the abend occurred on a STAT call, the first database PCB contains the return code. If it occurred on an ISRT call to the message queue, the I/O PCB contains the return code. Determine the cause of the return code, correct the error, and rerun the job.

0253

Explanation: The name of the database PCB specified, starting at column 16 of the last status statement read by the DL/I test program, matches none of the database PCB names in the PSB.

System Action: The IMS dependent or batch region terminates abnormally.

Programmer Response: Ensure that the PCB name in the status control statement is correct by comparing the database PCB names in the PSB specified on the EXEC statement. Correct the error, and resubmit the job.

Problem Determination: 2, 3, 4, 18, 19

0254

Explanation: The DL/I test program, DFSDDLT0, received an AI status code, indicating that one of the data sets used by DL/I could not be opened. A message on the output data set indicates the ddname of the data set that could not be opened.

System Action: The IMS dependent or batch region terminates abnormally.

Programmer Response: See “Status Code Explanations” in “DL/I Status Codes” on page 614 for possible causes of an AI status code.

Problem Determination: 2, 3, 4, 18, 19, 20

0255

Explanation: In the DL/I test program (DFSDDLT0), the specified limit of unequal compares was reached.

System Action: The IMS dependent or batch region terminates abnormally.

Programmer Response: None.

Problem Determination: None.

0256

Explanation: The communication restart processor for conversations detected an error while processing X'11' log records during emergency restart. This problem is probably caused by modifications to the IMS system.

System Action: IMS terminates abnormally.

Programmer Response: Determine what modifications might be causing this problem.

Master Terminal Operator Response: Run the Database Backout utility for each PSB that was scheduled when the original problem occurred; then cold start IMS.

0257

Explanation: An error occurred while scanning for a VTAM terminal control block when processing a X'11' or X'12' log record during an emergency restart. This problem is probably caused by modifications to the IMS system.

System Action: IMS terminates abnormally.

Programmer Response: Determine what modifications might have caused this problem.

Master Terminal Operator Response: Run the Database Backout utility for each PSB that was scheduled when the original problem occurred; then cold start IMS.

Problem Determination: 4, 5, 12, 14

0260

Explanation: Abend U0260 was issued for one of the following reasons:

- The number of parameters in the application program call to IMS exceeded the allowable limit of 18 or is equal to 0.
- The checkpoint call was used and one of the following applies:
  - Too few parameters were specified.
  - The number of user-specified areas exceeds the number specified on the XRST call.
  - The user area parameters are not paired (a length and address for each area to be dumped).
- The application program overlaid the DL/I function code so that the first character was not alphanumeric. This causes the field to be treated as a count field.

System Action: The online dependent or stand-alone batch region terminates abnormally. Other IMS regions are not affected.

Programmer Response: If the problem is an incorrect number of parameters, correct the DL/I call from the application program to conform to the format and content described in *IMS Version 9: Application Programming: Database Manager*.

When using the symbolic checkpoint call, be sure that the number of user-specified areas does not exceed the number specified on the XRST call.

If the application program overlaid the DL/I function code, correct the application program.

0261

Explanation: One of the parameters passed in a DL/I call from the application program to IMS is invalid. It either exceeds object machine size, does not meet alignment requirements, or violates storage protection boundaries.

Some possible causes for failure are:

- The call requires an AIB. No AIB was provided.
- The parameter count in the DL/I call is invalid.
- An invalid PCB is detected by IMS. For example:
  - A PL/I program does not match a PSB.
  - The CMPAT parameter might be specified incorrectly. If the application program is designed to use the IOPCB, CMPAT=YES should be specified in the PSGEN statement for the program to run in the DL/I batch region.
  - Incorrect DCB information on the GSAM input data set DD statement.

System Action: The online dependent or stand-alone batch region terminates abnormally.

Programmer Response: Correct the DL/I call list to conform to the format and content described in *IMS*

Version 9: Application Programming: Database Manager.

1. Correct the application program DL/I call statements.
2. Rebind the application program with the ENTRY control statement.

Problem Determination: 4, 17d

0262

Explanation: A batch message processing (BMP) program issued a DL/I call after receiving an XD status code. The XD status code was set because the program issued a DL/I checkpoint or SYNC call while the IMS system was undergoing a checkpoint freeze shutdown.

System Action: The BMP region is terminated abnormally.

Programmer Response: This is an application program error. Status code XD was returned on the DL/I checkpoint call to warn the application program not to issue another DL/I call. Correct the application program, and resubmit the job.

z/OS System Operator Response: First, contact your IMS system programmer for assistance. At IMS system restart, you can restart the batch message processing program from the DL/I checkpoint.

0263

Explanation: An invalid call was made to a Database Control (DBCTL) subsystem for a Coordinator Control (CCTL) subsystem thread. If this abend occurred when issuing a call against the IOPCB, then this is a user error; otherwise, this is an IMS internal error.

System Action: The CCTL thread is terminated.

Programmer Response: SNAP or SDUMP the CCTL thread.

Problem Determination: 38

0265

Explanation: This abend appears when one of the following conditions occurs:

- An interface error occurs in the SPOOL/API processing routines.
- A sync point PCB addressing error occurs in the SPOOL/API processing routines.

System Action: The IMS application region terminates abnormally.

Problem Determination: 1, 3, 4, 5, 8, 11, 27

0271

Explanation: An I/O error was detected while purging buffers during a checkpoint operation.

System Action: GSAM terminates abnormally.

Problem Determination: 4, 35

0272

Explanation: After receiving an AF status code identifying an invalidly formatted BSAM variable-length record, an application program issued a call to a GSAM data set without reinitializing GSAM.

System Action: GSAM terminates abnormally.

Programmer Response: See message DFS0768I for details.

0273

Explanation: An error was detected while repositioning a GSAM data set during an XRST call, or there is a GSAM DCB discrepancy (BLKSIZE/LRECL) between the original execution and the attempted restart execution.

System Action: GSAM abnormally terminated because position in the affected data set was unpredictable.

Programmer Response: Print the GSAM control block DSECTS (member name IGLI in SDFSMAC) for use in analyzing the GSAM control blocks. Determine and correct the reason for the error, and rerun the failing job.

0274

Explanation: An unexpected interface error occurred between module DFSSBIO0 and its caller.

System Action: IMS terminates abnormally.

Programmer Response: See *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis* for detailed diagnostic information.

0275

Explanation: IMS was not able to acquire an area needed to create a SNAP dump of the Sequential Buffering (SB) control blocks and areas. Message DFS2350I is issued along with this abend.

System Action: The application program terminates abnormally.

Programmer Response: Correct the error based on information in message DFS2350I.

0300

Explanation: While running under control of the Utility Control Facility, a message was produced for which the user requested an abend to occur.

System Action: The Utility Control Facility terminates, and a storage dump is produced on the SYSUDUMP or SYSABEND data set.

Programmer Response: Verify that the objective of the dump has been achieved. This dump is a diagnostic aid.

0302

Explanation: During the execution of the Database Data Set Recovery utility, DFSURDB0, an unrecoverable error occurred.

System Action: IMS terminates abnormally with a dump.

Programmer Response: None.

Problem Determination: 3, 4, 35

0303

Explanation: The parameter list constructed from the OPTION statements has been modified (see the *IMS Version 9: Installation Volume 2: System Definition and Tailoring* for information on specifying the IMS buffer pools). An error might have occurred in the user exit routine, which caused the routine to address and modify storage outside its legitimate address space.

System Action: The program terminates abnormally.

Programmer Response: Correct any indicated errors, and rerun the job.

Problem Determination: 3, 4, 35

0305

Explanation: Reading a VBS sequential data set, an incomplete spanned record was detected. Either a continuation segment was encountered without being preceded by a starting segment, or an end-of-file condition or a new segment was encountered after a starting segment without an ending segment.

System Action: IMS terminates abnormally.

Programmer Response: Correct the problem, and rerun the job.

Problem Determination: 1, 2, 3, 4

0306

Explanation: The length of the new Change Accumulation output record exceeds output buffer size.

System Action: Change Accumulation terminates abnormally with a dump.

Programmer Response: Correct any errors in the input to Change Accumulation, and rerun the job.

Problem Determination: 3, 35, and copies of input Log and Change Accumulation data sets.

0307

Explanation: Batch backout was not run with the same GSG name used when the log records were created.

System Action: Batch backout abnormally terminates.

System Programmer Response: Rerun batch backout with the correct GSG name.

Module: DFSBCKI0

0310

Explanation: The partial database reorganization step abends because of the condition indicated in the previously issued error message.

System Action: The step is abnormally terminated.

Programmer Response: See output of PDBR step for the error message that describes this problem.

Problem Determination: 4, 35

0311

Explanation: Surveyor detected an error.

System Action: The step is abnormally terminated.

Programmer Response: See output of Surveyor for the error message that describes this problem.

Problem Determination: None.

0315

Explanation: IMS received a nonzero return code from an IMSAUTH SVC function. Register 15 contains the IMSAUTH return code. For a description of these return codes, see “IMSAUTH Return Codes” on page 573.

System Action: IMS terminates abnormally with a dump.

Programmer Response: Take appropriate action according to the codes in register 15.

Problem Determination: 4, 11, 35

0316

Explanation: An unexpected or unrecoverable error was detected during coupling facility services initialization or subsequent execution. Register 15 contains the abend reason code. See *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis* for details on what causes this abend to be issued.

System Action: IMS terminates abnormally.

Programmer Response: See *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

Problem Determination: 1, 4, 35

0317

Explanation: A coupling facility failure was detected on the XRF alternate subsystem. The failure could be one of the following:

- Connection failure
- Structure rebuild failure

System Action: IMS terminates abnormally.

Programmer Response: See *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*. If the failure was a connection failure, restart the alternate subsystem after its connection to the coupling facility is reestablished.

Problem Determination: 1, 4, 35

0318

Explanation: Module DFSDVBI0 determined that the coupling facility services function cannot be initialized. To use this function, MVS release level 510 or higher is required. If a VSAM structure is to be used, DFSMS release level 120 or higher is required. Register 15 contains the abend reason code. See *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis* for details on what caused this abend to be issued.

System Action: IMS terminates abnormally.

Programmer Response: Verify the z/OS release level, the DFSMS release level, or both. See *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

0319

Explanation: Module DFSDVBI0 determined that coupling facility services initialization failed in a batch environment. Message DFS3381E is issued; the DATA part of the message identifies the reason for failure.

System Action: IMS terminates abnormally. One or more messages are issued identifying the reason for failure.

Programmer Response: See message DFS3381E.

Problem Determination: 1, 4

0320

Explanation: A CFNAMES control statement was specified to request use of the coupling facility; however, an IRLM at a release level that does not include coupling facility support was used. To use coupling facility services, IRLM version 2 or higher must be used.

System Action: IMS terminates abnormally.

Programmer Response: Verify the IRLM release level used.

0322

Explanation: An unexpected or unrecoverable error occurred in OSAM sequential buffering during execution for coupling facility services.

System Action: IMS terminates abnormally.

Programmer Response: See *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

Problem Determination: 1, 4, 35

0347

Explanation: A severe error condition was detected during HD Reorganization Unload, and a SYSUDUMP or SYSABEND DD statement was provided. This was caused by either an internal system error or a missing DD statement or data set.

All HD Reorganization Unload and Reload operations now include PHDAM and PHIDAM databases.

System Action: System terminates abnormally.

Programmer Response: Check all preceding messages for clues to what caused the dump. Correct any errors found, and rerun the job.

Problem Determination: 1, 2, 3, 4, 17d, 20, 35

0355

Explanation: A severe error condition was detected during HD Reorganization Reload, and a SYSUDUMP or SYSABEND DD statement was provided. This is possibly an internal system error.

All HD Reorganization Unload and Reload operations now include PHDAM and PHIDAM databases.

System Action: IMS terminates abnormally.

Programmer Response: Check all preceding messages for clues to what caused the dump. Correct any errors found, and rerun the job.

Problem Determination: 1, 2, 3, 4, 17d, 20, 35

0359

Explanation: The abend option was selected for the HISAM Reorganization Unload or Reload utility and a severe error occurred.

System Action: The utility terminates abnormally.

Programmer Response: Check all preceding messages for clues to what caused the dump. Correct any errors found, and rerun the job.

Problem Determination: 1, 2, 3, 4, 17d, 20, 35

0360

Explanation: User error.

Reason Code	Description
01	Transport Manager is not executing in protect key seven (supervisor state). Probable user error: specify `KEY(7)` in the parameter field of the transport manager `EXEC` statement. Module: ELXINIT0
02	A send filter exit routine failure has been detected. Recovery is attempted. If successful, filtering is suspended for the conversation. Module: ELXUISE0

0361

Explanation: Logic error in Transport Manager.

Reason Code	Description
01	Internal logic error: code in user address space does not match code in transport manager address space. Module: ELXUTM00
02	Internal logic error: invalid vector value in transport manager exit scheduler. Module: ELXUSX10
03	Internal logic error: invalid vector value in transport manager service routines. Module: ELXUS000
04	Internal logic error: invalid vector value in transport manager VTAM allocation 1 routine. Module: ELXUVA10
05	Internal logic error: send queue “Should Not Occur” condition in transport manager send support. Module: ELXUVS10
06	Internal logic error: unsupported what-received status or data length. Recovery is attempted after an SDUMP; the conversation is deallocated. Register 3 at entry to abend points to the RPL. Module: ELXUVXR0
07	Internal logic error: unsupported RPL6REQ/RPL6QUAL values in a completed RPL. Recovery is attempted after an SDUMP. Register 3 at entry to abend points to the RPL. Any conversation associated with the RPL is likely to be inoperative. Module: ELXUVXR0
08	RESMGR DELETE produced an error return code (saved in register 2). An SDUMP is created and recovery continues processing. Module: ELXUIFO0
09	Internal logic error: an invalid AFR function was received. Module: ELXUSX20
10	Internal logic error: an invalid status exit routine reason code. Module: ELXTITX0

0362

Explanation: Termination of transport manager has been requested by the operator.

Reason Code	Description
01	The `ABDUMP` command was invoked to take the system dump. The transport manager is abnormally terminated. Module: ELXCABN0

0363

Explanation: An unrecoverable error was detected by database tracking logic. Reason codes further identify the type of unrecoverable error:

Reason Code	Description
01	During initialization, an error return code was returned by the MVS DSPSERV/ALESERV macro while attempting to create a data space. The return code from R15 has been saved in R2, the reason code from R0 has been saved in R4. Module: DFSDT100, DFSDT320
03	During initialization, an error return

code was returned from IMODULE GETMAIN for loc=(any,any) private area storage in the DLT region, for the tracking hash table. The return code from R15 has been saved in R2.

Module: DFSDT150

04 During initialization, an error return code was returned from DFSDSM indicating that the tracking data space does not have storage for basic system areas. The return code from R15 has been saved in R2.

Module: DFSDT100, DFSDT320

07 During initialization, an error return code was returned from IMODULE LOAD indicating that a required module could not be loaded. The return code from R15 has been saved in R2.

Module: DFSSDT20

09 During initialization, an error return code was returned from DFSCWU indicating that milestone PST ITASKs could not be created. The return code from R15 has been saved in R2.

Module: DFSSDT20

10 An error return code was returned from DFSBCB GET indicating that AWE could not be created during initialization, milestone/quiesce processing, database status change processing, or abrupt-end-tracking processing. The return code from R15 has been saved in R2.

Module: DFSDT100, DFSDT160, DFSDT180, DFSDT330

11 During initialization, an error return code was returned from MVS TCBTOKEN request. The return code from R15 has been saved in R2.

Module: DFSDT100

12 During initialization, an error return code was returned from MVS SETLOCK request. The return code from R15 has been saved in R2.

Module: DFSDT100

13 During initialization or SAS AWE queue processing, an error return code was returned from DFSBCB GET indicating that storage could not be obtained for a control block or work area. The return code from R15 has been saved in R2.

Module: DFSDT150, DFSDT300

14 During tracking redo processing, an error return code was returned from IMODULE GETMAIN for loc=(any,any) private area storage in the DLT region, indicating that storage could not be obtained for control blocks needed. The return code from R15 has been saved in R2.

Module: DFSDT400

15 An error return code was returned from IMODULE GETSTOR, indicating that storage could not be obtained by the tracking CTL AWE processor for an AWE. The return code from R15 has been saved in R2.

Module: DFSDT240

16 During initialization, an error return code was returned from IMODULE GETMAIN indicating that storage could not be obtained in subpool 231 for the DL/I database tracking trace table. The return code from R15 has been saved in R2.

Module: DFSDT100

19 During initialization, an error return code was returned from IMODULE GETMAIN for LOC=(any,any) private area storage, indicating that storage could not be obtained for control blocks needed. The return code from R15 has been saved in R2.

Module: DFSSDT20

System Action: IMS terminates abnormally with a dump.

System Programmer Response: Take appropriate action based on the return code in register 2.

0364

Explanation: A logic error was detected during database tracking. Reason codes further identify the type of logic error:

Reason Code	Description
01	An invalid AWE request code was detected by database tracking CTL AWE processor or SAS AWE queue server. Module: DFSDT240, DFSDT300
02	An invalid function code was detected by milestone/quiesce processing or database status change processing.

Module: DFSDT160, DFSDT180, DFSDT250

03 An invalid type of database redo record was encountered during tracking redo-queue processing.

Module: DFSDT240

System Action: IMS terminates abnormally with a dump.

System Programmer Response: Contact IBM.

0365

Explanation: A logic error was detected during isolate log send (ILS) processing. Reason codes further identify the type of logic error:

Reason Code	Description
01	An incorrect function code was detected by ILS. Module: DFSIL010, DFSIL210, DFSIL240, DFSIL330, DFSIL340, DFSIL500, DFSIL510
02	An ILS internal logic error was detected. Module: DFSIL300, DFSIL320
03	ILS issued a DBRC macro call and received an invalid return code. See either message DFS4072A or DFS4095I for more information about the error. Module: DFSIL300, DFSIL310
05	An invalid status exit reason code was detected. Module: DFSIL320, DFSIL400

System Action: IMS terminates abnormally with a dump.

System Programmer Response: Contact IBM.

0367

Explanation: An IMS system error was encountered during DL/I call processing for a GU (message), ISRT (message) or SETO call. IMS writes a '67D0' log record indicating the cause of the error. This abend is set by DFSDLA30 and issued by DFSECP10/DFSECP20.

System Action: The application program terminates abnormally.

Programmer Response: Check the '67D0' log record to determine the cause of the error and contact the IBM Support Center.

Problem Determination: 1, 3, 5, 6, 36

0368

Explanation: A CQS request failed during DL/I call processing for a GU (message) or an ISRT (message). IMS writes a type X'67D0' log record indicating the cause of the error. This abend is set by DFSDLA30 and issued by DFSECP10/DFSECP20.

System Action: The application program terminates abnormally. The input message is discarded if abend 0368 occurs on an ISRT call; the input message is not discarded if this abend occurs on a GU. The transaction is not stopped and the PSB is not stopped.

Programmer Response: Check the X'67D0' log record to determine the cause of the error. Contact the IBM Support Center.

Problem Determination: 1, 3, 5, 6, 36

0369

Explanation: The buffer handler module, DFSDVBH0, has detected an internal error. The caller provided the buffer handler with an RBA whose low order bit contains either '0' or '1' referring either to data sets A-J or to data sets M-V of a HALDB, respectively. The value is inconsistent with DMBORFL2.

Analysis: Registers R4 and R5 at time of abend will indicate what the internal error might be. Both registers will have either a '0' or '1' where '0' means that I/O is for one of the A-J data sets and '1' means that I/O is for one of the M-V data sets.

Both registers must have the same values for processing to continue. On the other hand, if both registers have different values, processing immediately returns to the caller with PSTSUBCD=X'08' and PSTRTCDE=X'10' set. The value in register R4 is the odd bit of PSTBYTNM and the value in register R5 is the flag bit in DMBORFL2.

System Action: The task pseudoabends with U0369.

System Programmer Response: Contact the IBM Support Center.

Module: DFSDVBH0

0370

Explanation: A CQS request failed due to a structure-full condition on a PURG call or during non-phase 2 syncpoint processing. This abend is set by DFSFXC40 and issued by DFSECP10, DFSECP20, DFSPCC20, and DFSCPY00.

System Action: The application program ends abnormally. The transaction and PSB are stopped. The input message is not discarded.

Programmer Response: Correct the structure-full condition. Contact the IBM Support Center.

Problem Determination: 1, 3, 5, 6, 36

0371

Explanation: During Phase 1 of syncpoint processing, a DFSQMGR Insert Prefix call was issued to append an IMSID to the queue name of a program-to-program switch message. The DFSQMGR call received a RC=08, which indicates an internal QMGR error.

System Action: The application program ends abnormally. The transaction and PSB are stopped. The input message is discarded.

Module: DFSFXC40

Problem Determination: 1, 3, 5, 6, 36

0378

Explanation: IMS was unable to parse the DFSRSRxx member for one of the reasons below. The subcodes can be found in R15 at abend.

Reason Code	Description
01	One or more parameter errors were found while processing member.
02	Unable to obtain necessary working storage required while processing. An IMODULE GETMAIN failed; the return code is displayed in the DFS2929A message which precedes this abend. For more information, see “IMODULE Return Codes” on page 571.
03	The TSO/E IKJPARS service used for parsing returned a nonzero return code indicating an error. The return code is displayed in the DFS2929A message which precedes this abend. See the *TSO Extensions Version 2 Programming Services manual* TSO writes an error message to the data set indicated by the SYSTSPRT DD statement in the IMS job.

Analysis: The DFSRSRxx member contains parameters for an RSR system. This member is selected by specifying the two-character suffix on the RSRMBR= exec parameter in the IMS procedure; the default is 00. While processing this member, IMS detected an error. This abend is preceded by one or more DFS2929A messages, which indicate the reason for the abend.

System Action: IMS terminates abnormally.

System Programmer Response: The following actions correspond to the reason codes listed in the explanation.

1. Correct the error in the DFSRSRxx member and restart IMS. This return code indicates the member was parsed correctly, but the values were not in the allowable range.
2. Increase the IMS region size and restart IMS. If this problem recurs report the problem to IBM.
3. Analyze the TSO error messages and correct the syntax of the DFSRSRxx member, then restart the IMS system.

Module: DFSRPP00

0379

Explanation: A transport manager instance (TMI) name was not specified for an IMS batch or utility job for which a global service group (GSG) name and logging were specified. A license certificate could not be found for either the DLT or RLT features.

Analysis: Specifying a GSG name for a batch or utility job that creates a log makes the job RSR-capable. However, a TMI name must also be specified for RSR processing. The abend is issued because a TMI name was not specified. Message DFS2924I precedes the abend.

System Action: IMS terminates abnormally.

System Programmer Response: Correct the IMS system definition to specify the TMI name or supply the name using the TMI= execution parameter.

If you’re running on a z/OS operating system that is running a zSeries® processor, add the necessary license certificates for RLT, DLT, or both.

Module: DFSXBAT0, DFSXDCC0

0380

Explanation: A logic error was detected during log router processing. Reason codes further identify the type of logic error:

Reason Code	Description
01	An invalid AWE function code was detected by a log router ITASK. Module: DFSLRART, DFSLRRDS, DFSLRIDS, DFSLRSAR, DFSLRDCR, DFSLRRDZ, DFSLRILT, DFSLRMRG, DFSLRETI, DFSLRASC, DFSLRMIL, DFSLRARC, DFSLRLTR, DFSLRTRM, DFSLRCAS, DFSLRMST, DFSLRARP, DFSLROPR, DFSLRDDE, DFSLROIC, DFSLRRDC, DFSLRDSS, DFSLRRR0
02	An invalid parameter was detected while allocating a conversation with an active subsystem or isolated log sender by the Transport Manager Subsystem (TMS). Message DFS4018I accompanies the abend code. Register 14 contains the reason code from the TMS allocate conversation request. Module: DFSLRCS0, DFSLRICN

03 An invalid parameter error code was returned by the transport manager subsystem (TMS) as a result of an allocate conversation request. Message DFS4018I accompanies the abend code. Register 14 contains the reason code from the TMS allocate request.

Module: DFSLRCS0, DFSLRICN

04 The tracking subsystem processed an invalid tracking subsystem log record (49xx) during tracking subsystem restart. Register 14 contains the address of the log record.

Module: DFSLRARR

05 The tracking subsystem detected a missing gap descriptor block while attempting to obtain missing active subsystem log data from an Isolated Log Sender at the active site.

Module: DFSLRICM, DFSLRIDS

06 The tracking subsystem detected an error while attempting to communicate with an active subsystem or the Isolated Log Sender (ILS) at the active site. Register 14 contains the reason code from the send request.

Module: DFSLRASC, DFSLRIDS, DFSLRSCM

07 An invalid parameter was detected while deallocating a conversation with an active subsystem or isolated log sender by the Transport Manager Subsystem (TMS). Register 14 contains the reason code from the TMS deallocate conversation request.

Module: DFSLRASC, DFSLRCAS, DFSLRCS0, DFSLRICN, DFSLRSTX

08 The tracking subsystem detected invalid log sequence numbers when attempting to close a tracking log with DBRC. The first log sequence number of the tracking log is greater than the last log sequence number. Register 14 has the address of a parameter area containing the invalid log sequence numbers.

Module: DFSLRDDE, DFSLRRDD, DFSLRRDY, DFSLRSFT

09 The tracking subsystem attempted to write a log buffer with no data. Register 14 contains the address of the empty buffer.

Module: DFSLRWRT

0A The tracking subsystem received active subsystem log data out of order.

Module: DFSLRREX

0B The tracking subsystem received an invalid package descriptor record from an active subsystem.

Module: DFSLRREX

0C The tracking subsystem Transport Manager Subsystem (TMS) status exit routine received an invalid function request. Register 14 contains the invalid function code.

Module: DFSLRSTX

0D The tracking subsystem detected that an active subsystem provided log buffer with no data.

Module: DFSLRIRX, DFSLRREX

0E The tracking subsystem is unable to find the milestone position block containing the log position required for recovery of tracked databases or AREAs.

Module: DFSLREDT

0F An AWE was received by a tracking subsystem ITASK that could not be processed prior to tracking subsystem initialization.

Module: DFSLRDSS

10 The tracking subsystem detected an invalid request code from the isolated log sender (ILS) at the active site. Register 14 contains the invalid request code.

Module: DFSLRIRX

11 The tracking subsystem detected an invalid buffer header in which the buffer header does not contain the last log sequence number contained in the buffer. Register 14 contains the address of the buffer header.

Module: DFSLRRR0

12 An OPEN macro was issued for a tracking log with a block size larger than the buffer size available to read it. Message DFS4012I with return code X'FFFF' precedes this abend. That message identifies the tracking log data set with the invalid block size. The buffer size is the maximum of the BLOCK keyword values of the SLDSDEF, ARCHDEF and RLDSDEF

parameters of IMS.PROCLIB member DFSRSRxx. See message DFS4012I for more information.

Module: DFSLRDOP

13 The tracking subsystem detected a sharing subsystem using an active subsystem log record and has no record of it.

Module: DFSLRMRG

14 The tracking subsystem is merging active subsystem log records and is unable to find a control block representing an active subsystem participating in the merge.

Module: DFSLRMRG

15 The tracking subsystem is presented with a second sharing log record representing an active subsystem participating in the merge.

Module: DFSLRMRG

16 The tracking subsystem detected invalid feedback after routing data to the tracking subsystem trackers while merging log records from multiple active subsystems.

Module: DFSLRMRG

18 The tracking subsystem detected an invalid condition while attempting to read a tracking log. Register 14 contains the address of the invalid AWE.

Module: DFSLROPR, DFSLRRR0

1A The tracking subsystem detected an invalid log record from an active subsystem.

Module: DFSLRIRX, DFSLRREX

1B The tracking subsystem detected an invalid STCK value in a log record from an active subsystem.

Module: DFSLRBIR, DFSLRRBF, DFSLRSDS, DFSLRWRT

1C The tracking subsystem is unable to read a set of log records required to complete restart.

Module: DFSLRRRS

1D The tracking subsystem has determined that the position being set for routing a log is not valid. This error could result from an internal logic error or an improper cold start of the tracking subsystem.

Module: DFSLRRR0, DFSLRRRS

1E (Reason code 1E is not used)

21 The tracking subsystem received data from the isolated log sender without a “begin data set” notification.

Module: DFSLRIDS

22 The tracking subsystem is told to stop receiving data from the isolated log sender, but cannot find the required control blocks.

Module: DFSLRIDS

23 The tracking subsystem detected a buffer in the available buffer pool that was not marked as available.

Module: DFSLRASC, DFSLRBIT, DFSLRGLB, DFSLRIDS, DFSLRIRX, DFSLRLTR, DFSLRMRG, DFSLROPR, DFSLRORM, DFSLRORN, DFSLRRDC, DFSLRRDF, DFSLRRDS, DFSLRRDW, DFSLRREX, DFSLRRRD, DFSLRRRS, DFSLRRR0, DFSLRRTO, DFSLRSAR, DFSLRSBR, DFSLRSIN, DFSLRTRS, DFSLRWRT

24 The tracking subsystem detected a buffer in the available buffer pool that belongs to the automatic archive buffer pool.

Module: DFSLRASC, DFSLRBIT, DFSLRGLB, DFSLRIDS, DFSLRIRX, DFSLRLTR, DFSLRMRG, DFSLROPR, DFSLRORM, DFSLRORN, DFSLRRDC, DFSLRRDF, DFSLRRDS, DFSLRRDW, DFSLRREX, DFSLRRRD, DFSLRRRS, DFSLRRR0, DFSLRRTO, DFSLRSAR, DFSLRSBR, DFSLRSIN, DFSLRTRS, DFSLRWRT

25 The tracking subsystem was either unable to obtain information about missing log data from DBRC, or obtained invalid information about missing log data from DBRC.

Module: DFSLRRRS

26 The tracking subsystem detected an invalid buffer when processing the buffer to write to a tracking log.

Module: DFSLRARP DFSLRWRT

27 The tracking subsystem needs to close a data set that resides on a

mountable device type, but is unable to find the TCB which opened the data set.

Module: DFSLRDSS

28 The tracking subsystem detected an internal error while attempting to obtain a tracking subsystem latch. Register 14 contains the return code from the obtain latch request.

Module: DFSLRARA, DFSLRARL, DFSLRARR, DFSLRDCR, DFSLRDDE, DFSLRDSS, DFSLRLTS, DFSLRMST, DFSLRRDD, DFSLRRDS, DFSLRRDY, DFSLRRST, DFSLRSAR, DFSLRSDS, DFSLRSFT, DFSLRSIN, DFSLRSWB, DFSLRWRT

29 The tracking subsystem detected an internal error while attempting to release a tracking subsystem latch. Register 14 contains the return code from the release latch request.

Module: DFSLRARA, DFSLRARL, DFSLRARR, DFSLRDCR, DFSLRDDE, DFSLRDSS, DFSLRLTS, DFSLRMST, DFSLRRDD, DFSLRRDS, DFSLRRDY, DFSLRRST, DFSLRSAR, DFSLRSDS, DFSLRSFT, DFSLRSIN, DFSLRSWB, DFSLRWRT

2A The tracking subsystem found no logs to start a database or AREA as a result of a `/START` command, but was notified by DBRC that the database or AREA requires recovery.

Module: DFSLRORH DFSLRORM DFSLRORN

2B The tracking subsystem determined that the start point for a database or AREA was invalid when processing a `/START DATABASE`, `UPDATE DB START(ACCESS)`, `/START AREA` or `UPDATE AREA START(ACCESS)` command.

Module: DFSLRORM DFSLRORN

2C The tracking subsystem found the initial log record for an active subsystem was not in the concurrent image copy (CIC) as a result of processing a `/START DATABASE`, `UPDATE DB START(ACCESS)`, `/START AREA` or `UPDATE AREA START(ACCESS)` command.

Module: DFSLROPR

2D The tracking subsystem determined that DBRC did not supply the start-point information required for online forward recovery (OFR) processing.

Module: DFSLROIC, DFSLRORH, DFSLRORM

2E The tracking system detected an I/O error while accessing a tracking log data set. The error occurred during either the BSAM READ macro or BSAM WRITE macro (not the BSAM CHECK macro). The abend originates in DFSLRRDU if the error occurred during BSAM READ; it originates in DFSLRSWB if the error occurred during BSAM WRITE. Refer to the accompanying access method services message to determine the appropriate action to take.

Module: DFSLRRDU, DFSLRSWB

2F During OFR, the log router detected a log data set descriptor in the list returned by DBRC that represented a log data set that contained data that occurred prior to the current OFR position.

Module: DFSLRORM

0381

Explanation: An unrecoverable resource shortage was detected by log router processing logic. Reason codes further identify the type of unrecoverable error:

Reason Code
Description

01 The tracking subsystem was unable to obtain an AWE. Register 14 contains the reason code from DFSBCB.

Module: DFSLRARA, DFSLRARC, DFSLRARI, DFSLRARP, DFSLRARR, DFSLRART, DFSLRAR1, DFSLRASC, DFSLRAST, DFSLRAS1, DFSLRBIR, DFSLRBIT, DFSLRCAS, DFSLRCS0, DFSLRDAL, DFSLRDBT, DFSLRDCR, DFSLRDDE, DFSLRDSS, DFSLRDTM, DFSLREDT, DFSLRICM, DFSLRICN, DFSLRIDS, DFSLRILT, DFSLRIN1, DFSLRIRX, DFSLRLTC, DFSLRLTR, DFSLRMIL, DFSLRMRG, DFSLRMST, DFSLROCR, DFLSROIC, DFSLROPR, DFSLRORM, DFSLRORN, DFSLRRBF, DFSLRRDA, DFSLRRDB, DFSLRRDC, DFSLRRDD, DFSLRRDF, DFSLRRDH, DFSLRRDK, DFSLRRDN, DFSLRRDR, DFSLRRDS, DFSLRRDT, DFSLRRDU, DFSLRRDW, DFSLRRDX, DFSLRRDY, DFSLRRDZ, DFSLRREX, DFSLRRRS, DFSLRRR0, DFSLRSAR, DFSLRSBR, DFSLRSDS,

DFSLRSFG, DFSLRSFT, DFSLRSIN, DFSLRSTX, DFSLRTK0, DFSLRWRT

02 The tracking subsystem was unable to obtain BRLSB storage in CSA for communication with DBRC. Register 14 contains the reason code from the storage request.

Module: DFSLRAST, DFSLRDAL, DFSLRDBT, DSFLRDCR, DFSLRDSS, DFSLRIN0, DFSLRORS, DFSLRRDB, DFSLRRDC, DFSLRRDN, DFSLRRDZ, DFSLRRRS

03 The tracking subsystem was unable to obtain storage for a log buffer(s). Register 14 contains the reason code from the storage request.

Module: DFSLRDCR, DFSLRDSS, DFSLRRCR

04 The tracking subsystem was unable to create an ITASK. Register 14 contains the reason code.

Module: DFSLRASC, DFSLRDAL, DFSLRDCR, DFSLRDSS, DFSLROIC

05 The tracking subsystem was unable to obtain extended CSA storage. Register 14 contains the reason code from the storage request.

Module: DFSLRARS, DFSLRDBT, DFSLRDSS, DFSLRDTC DFSLRMIL, DFSLRMST, DFSLRRCR, DFSLRRDB, DFSLRRDC, DFSLRRDH, DFSLRRDN, DFSLRRDS, DFLSRRDX, DFSLRRDZ, DFSLRRRD, DFSLRRST, DFSLRSIN

06 The tracking subsystem was unable to obtain storage from BCB to represent missing log data. Register 14 contains the reason code from the storage request.

Module: DFSLRASC, DFSLRAS1, DFSLRDDE, DFSLRICM, DFSLRIDS, DFSLRIGP, DFSLRRDH, DFSLRRDX, DFSLRSAR, DFSLRSDS

07 The tracking subsystem was unable to obtain storage using IMODULE. Register 14 contains the reason code.

Module: DFSLRARA, DFSLRARC, DFSLRARI, DFSLRARL, DFSLRARR, DFSLRAR1, DFSLRASC, DFSLRAS1, DFSLRCAS, DFSLRCS0, DFSLRDAL, DFSLRDCR, DFSLRDDE, DFSLRDIS, DFSLRDSS, DFSLRDTM, DFSLREDT, DFSLRGSL, DFSLRICM, DFSLRICN, DFSLRIDS, DFSLRILT, DFSLRIN0, DFSLRINS, DFSLRIRX, DFSLRLTS, DFSLRMIL, DFSLRMRG, DFSLRMST, DFSLROIC, DFSLRORH, DFSLRORM, DFSLRORN, DFSLRORS, DFSLRRDA, DFSLRRDB, DFSLRRDC, DFSLRRDD, DFSLRRDH, DFSLRRDN, DFSLRRDR, DFSLRRDS, DFSLRRDY, DFSLRRRS, DFSLRRR0, DFSLRRST, DFSLRSAR, DFSLRSDS, DFSLRSFT, DFSLRSIN, DFSLRSTX, DFSLRTRM, DFSLRSWB, DFSLRTRM

08 The tracking subsystem was unable to create a conversation manager ITASK. Register 14 contains the reason code from the create work unit request.

Module: DFSLRIN0

09 The tracking subsystem was unable to load a load module with IMODULE. Register 14 contains the reason code from the imodule func=load request.

Module: DFSLRIN0

0A The tracking subsystem was unable to obtain a save area set for use by the tracking subsystem transport manager exits. Register 14 contains the reason code from BCB.″

Module: DFSLRIN0

0B The tracking subsystem was unable to create a tracking log data set manager ITASK. Register 14 contains the reason code from the create work unit request.

Module: DFSLRIN0

0C The tracking subsystem was unable to create a milestone manager ITASK. Register 14 contains the reason code from the create work unit request.

Module: DFSLRIN0

0D The tracking subsystem was unable to create an isolated log transport manager ITASK. Register 14 contains the reason code from the create work unit request.

Module: DFSLRIN0

0E The tracking subsystem was unable to create an automatic archive ITASK. Register 14 contains the reason code from the create work unit request.

Module: DFSLRIN0

0F The tracking subsystem was unable to create a tracking log read controller ITASK. Register 14 contains the reason code from the create work unit request.

Module: DFSLRIN0

10 The tracking subsystem was unable to attach subordinate TCBs. Register 14 contains the reason code from the dfsattach request.

Module: DFSLRDAL, DFSLRDCR, DFSLRDSS, DFSLRIN0

11 The tracking subsystem was unable to obtain a service group list from DBRC during initialization. Register 14 contains the reason code from DBRC.

Module: DFSLRIN1

12 The Remote Site Recovery tracking subsystem detected an unexpected return code from a deallocate conversation request for a conversation with the isolated log sender at the active site. Register 14 contains the return code from the deallocate conversation attempt.

Module: DFSLRILT

13 An INITECB failure occurred while attempting to read tracking log data in a Remote Site Recovery tracking subsystem. Register 14 contains the reason code from the INITECB request.

Module: DFSLRBIR, DFSLRRDT

14 The tracking subsystem detected an unexpected return code from DBRC on an allocate database/AREA attempt. Register 14 contains the reason code from the DBRC request.

Module: DFSLRDBT

15 The tracking subsystem detected an unexpected return code from DBRC on a deallocate database/AREA attempt. Register 14 contains the reason code from the DBRC request.

Module: DFSLRDBT

16 The Remote Site Recovery tracking subsystem detected an error during the log truncation phase of unplanned takeover processing. An unexpected return code from DBRC when the truncation request is made. Register 14 contains the reason code from the DBRC request.

Module: DFSLRLTS

17 The tracking subsystem detected an unexpected return code from DBRC on a replace tracking logs for truncation attempt for log truncation during unplanned takeover. Register 14 contains the reason code from the DBRC request.

Module: DFSLRLTR

18 The tracking subsystem was unable to obtain BCB storage. Register 14 contains the reason code from the BCB request.

Module: DFSLRDCR, DFSLRICM, DFSLRICN, DFSLRILT, DFSLRINS, DFSLRIN0, DFSLRMIL, DFSLROIC, DFSLRORS, DFSLRRST

19 The tracking subsystem was unable to create an online forward recovery ITASK. Register 14 contains the reason code from the create work unit request.

Module: DFSLRIN0

1B An error was detected when the RSR tracking IMS tried to create a position data set during RSR tracking IMS shutdown. Register 14 contains one of the following

1

An error was detected when the RSR tracking IMS tried to create the position data set. See accompanying messages and resolve the problem identified in the messages before restarting the tracking IMS.

2

Another data set was detected with the same name as the position data set. Delete the position data set identified in the accompanying messages before shutting down the tracking IMS.

3

An error was detected when the RSR tracking IMS tried to open the position data set. See accompanying messages and resolve the problem identified in the messages before restarting the tracking IMS.

4

An error was detected when the RSR tracking IMS tried to write to the position data set. See accompanying messages and resolve the problem identified in the messages before restarting the tracking IMS.

5

An error was detected when the RSR tracking IMS tried to close and deallocate the position data set. See accompanying messages and resolve the problem identified in the messages before restarting the tracking IMS.

6 A read error was detected while processing the secondary position data set during a cold start of the RSR tracking IMS. The read error occurred after an error was detected while processing the primary position data set. The RSR tracking IMS is unable to set the routing position and cannot continue with cold start processing. Resolve the cause of the errors and start the RSR tracking IMS.

Module: DFSLRDCR, DFSLRDOP, DFSLRDSS, DFSLRTRM

1C The tracking subsystem was unable to log a tracking subsystem log record. Register 14 contains the reason code from the ILOG attempt.

Module: DFSLRARL, DFSLRARR, DFSLRASC, DFSLRAST, DFSLRAS1, DFSLRCAS, DFSLRDCR, DFSLRDDE, DFSLRDSS, DFSLRDTM, DFSLRLTR, DFSLRLTS, DFSLRMIL, DFSLRMST, DFSLROIC, DFSLRRCR, DFSLRRDD, DFSLRRDH, DFSLRRDY, DFSLRSAR, DFSLRSDS, DFSLRSFT, DFSLRSWB, DFSLRTK0, DFSLRTRM, DFSLRWRT

1D The tracking subsystem failed to create the required output tracking log for log truncation during unplanned takeover processing.

Module: DFSLRLTS

1E The tracking subsystem was unable to obtain at least 1 log buffer for use by log truncation during unplanned takeover processing.

Module: DFSLRLTS

1F The tracking subsystem was unable to create a log reader for use by log truncation during unplanned takeover processing. Register 14 contains the return code from the create read request.

Module: DFSLRLTS

Module: DFSLRIN0

20 The tracking subsystem was unable to create an end tracking ITASK. Register 14 contains the reason code from the create work unit request.

Module: DFSLRIN0

21 The tracking subsystem detected an error while processing the position data set. Register 14 contains one of the following the reason codes:

- The tracking subsystem was unable to create a position data set.
- A data set with the same name as the position data set was found when the tracking subsystem attempted to create it.
- An error was detected while attempting to open the position data set.
- An error was detected while attempting to write to the position data set.
- An error was detected while attempting to close the position data set.

Module: DFSLRDCR, DFSLRTRM

22 The tracking subsystem experienced an unexpected return code from DBRC on a query tracking logs request. Register 14 contains the return code from DBRC.

Module: DFSLRIGP, DFSLRINI, DFSLRRRS

23 The tracking subsystem experienced an unexpected return code on a call to DBRC. Register 14 contains the return code from DBRC.

Module: DFSLRAST, DFSLRDDE, DFSLRDSS, DFSLRILT, DFSLRINI, DFSLRRDB, DFSLRRDD, DFSLRRDH, DFSLRRDN, DFSLRRDX, DFSLRRDY, DFSLRRRS, DFSLRSAR, DFSLRSDS, DFSLRTK0, DFSLRTRM

24 The tracking subsystem detected an invalid control block. Register 14 contains the address of the control block.

Module: DFSLRART

25 The tracking subsystem requires archive SLDS to be defined before allowing unplanned takeover processing to continue. This abend is preceded by message DFS4030A. See the message description for further details.

Module: DFSLRLTS, DFSLRTRM

27 The log router is unable to create the position data set ITASK. Register 14 contains the create work unit return code.

Module: DFSLRIN0

| **28** The set owner call to DBRC for a HALDB Online Reorganization at the tracking site failed.

Module: DFSLRDBT

| **29** The set owner call to DBRC for a HALDB Online Reorganization at the tracking site failed.

Module: DFSLRDBT

| **2A** The reset cursor call to DBRC for a HALDB Online Reorganization at the tracking site failed.

Module: DFSLRDBT

0384

Explanation: A service invoked by the Recovery Data Manager returned an unexpected result. Reason codes further identify the type of error:

Reason Code	Description
002	Obtain variable length storage error The Recovery Data Manager is unable to obtain storage required for

recovery. Register 14 contains the return code from the obtain storage service.

Modules: FRDRPPI00, FDRPPR00, FDRPPS00, FDRRVAM0, FDRRVGF0, FDRRVIA0, FDRRVLM0, FDRRVPR0, FDRRVQD0, FDRRVS00

003 Load error

The Recovery Data Manager is unable to load modules required for recovery. Register 14 contains the return code from the load service.

Modules: FDRPPI00, FDRPPR00, FDRPPS00, FDRRVMI0, FDRRVS10

004 Obtain fixed length storage

The Recovery Data Manager is unable to obtain fixed length storage. Register 14 contains the return code from the load service.

Modules: FDRRVAC0, FDRRVAM0, FDRRVIA0, FDRRVIC0, FDRRVIR0, FDRRVM00, FDRRVPR0, FDRRVQD0, FDRRVRB0, FDRRVRC0, FDRRVRD0, FDRRVWI0, FDRRVWR0, FDRRVWT0

005 Create thread error

If the module is FDRRVIC0, the Recovery Data Manager is unable to create an image copy restore dispatchable thread. If the module is FDRRVIR0, the Recovery Data Manager is unable to gain access to image copy restore dispatchable thread blocks. Register 14 contains the return code from the thread service.

Modules: FDRRVIC0, FDRRVIR0

007 Enqueue AWE error

The Recovery Data Manager is unable to enqueue an asynchronous work element to a dispatchable thread. Register 14 contains the return code from the enqueue service.

Modules: FDRRVAC0, FDRRVAM0, FDRRVIA0, FDRRVIC0, FDRRVIR0, FDRRVM00, FDRRVPR0, FDRRVQD0, FDRRVRB0, FDRRVRC0, FDRRVRD0, FDRRVWI0, FDRRVWR0, FDRRVWT0

008 Attach TCB error

The Recovery Data Manager image copy restore controller is unable to attach a TCB for an image copy restore instance. Register 14 contains the return code from the attach TCB service.

Modules: FDRRVIC0

009 Message error

The Recovery Data Manager is unable to issue a message. Register 14 contains the return code from the message service.

Modules: FDRRVAM0, FDRRVDA0, FDRRVDD0, FDRRVID0, FDRRVII0, FDRRVIR0, FDRRVIS0, FDRRVRB0, FDRRVRC0, FDRRVRD0, FDRRVWC0, FDRRVWR0

00A Buffer error

The Recovery Data Manager is unable to obtain a data buffer. Register 14 contains the return code from the obtain buffer service.

Modules: FDRRVMI0, FDRRVPR0

00B Set storage length

The Recovery Data Manager is unable to set values for obtaining fixed storage. Register 14 contains the return code from the set storage service.

Modules: FDRRVMI0

00C Post error

The Recovery Data Manager is unable to post a dispatchable thread. Register 14 contains the return code from the post service.

Modules: FDRRVAM0

00F Write to IMS pipe error

The Recovery Data Manager detected an error sending data to the Database Recovery Manager using an IMS pipe service. Register 14 contains the return code from the wait service.

Modules: FDRRVWR0

011 Release storage error

The Recovery Data Manager is unable to release storage. Register 14 contains the return code from the wait service.

Modules: FDRRVPR0

012 Terminate thread

The Recovery Data Manager is unable to terminate a thread. Register 14 contains the return code from the wait service.

Modules: FDRRVIR0

013 Create IMS pipe error

The Recovery Data Manager is unable to create an IMS pipe for inter-address space communication. Register 14 contains the return code from the wait service.

Modules: FDRRVPR0

014 Address space parameter error

The Recovery Data Manager experienced an error using the ASEXT macro to access and interpret parameters passed by the Database Recovery Manager as part of creating the Recovery Data Manager address space. Register 14 contains the return code from the create address space service.

Modules: FDRRVMI0

015 IMS pipe create error in DSPSERV

The IMS pipe create service detected an error from the DSPSERV macro. Register 14 contains the return code from the DSPSERV macro.

Modules: FDRPPIB0

016 IMS pipe create error in ALESERV

The IMS pipe create service detected an error from the ALESERV macro. Register 14 contains the return code from the ALESERV macro.

Modules: FDRPPIB0

017 Establish ESTAE error in ESTAEX

The IMS pipe service detected an error while using the ESTAEX macro.

Modules: FDRPPIB0, FDRPPRB0, FDRPPSB0

0385

Explanation: The Recovery Data Manager detected a logic error. Reason codes further identify the type of error:

Reason Code	Description
001	Invalid AWE function code A Recovery Data Manager thread attempted to process an unknown AWE function request. Register 14 contains the AWE function code. Modules: FDRRVAM0, FDRRVIR0, FDRRVLM0, FDRRVM00, FDRRVQD0, FDRRVRC0, FDRRVRD0, FDRRVSP1
002	Data set allocation parameter error The Recovery Data Manager detected a data set allocation parameter error. Register 14 contains the address in the FDRRVRA control block. Modules: FDRRVDA0
003	Control function error The Recovery Data Manager control pipe routine detected an unknown function request from the Database Recovery Manager. Modules: FDRRVPR0
005	Invalid recovery buffer The Recovery Data Manager detected an invalid recovery buffer on the unused recovery buffer chain. Modules: FDRRVGF0, FDRRVIC0, FDRRVLM0, FDRRVQD0, FDRRVRB0
006	Invalid storage size The Recovery Data Manager detected an unusable storage size for an obtain storage request. Modules: FDRPPIB0, FDRRVDA0
009	SSID error The Recovery Data Manager detected an invalid number of subsystem identifiers in the SSID list. Register 14 contains the address of the AWE containing the invalid number of SSIDs. Modules: FDRRVQD0
00A	Invalid record detected The Recovery Data Manager detected an invalid record. Modules: FDRRVPR0, FDRRVRB0
00B	Invalid data buffer detected The Recovery Data Manager detected a buffer with invalid data. Modules: FDRRVIA0, FDRRVQD0
00D	Image copy restore function error

The Recovery Data Manager image copy restore process detected an invalid function request

Modules: FDRRVID0

015 Invalid ECB address

The Recovery Data Manager is unable to get the task ECB address.

Modules: FDRRVLM0

016 Log data merge setup or parameter error

The Recovery Data Manager detected one of the following errors when passed a buffer to merge:

- A new merge request has not been received (no position block exists).
- An invalid buffer pointer (0) was detected.
- An invalid (0) merge token was passed.

Modules: FDRRVLM0

017 Invalid end of data detected

The Recovery Data Manager detected an end of data notification with at least one SSID still in an active state.

Modules: FDRRVLM0

018 Invalid merge identifier

The Recovery Data Manager was passed an invalid merge ID when a buffer was passed to it for processing.

Modules: FDRRVLM

019 Invalid merge buffer

The Recovery Data Manager detected a buffer with one of the following errors:

- The subsystem index is greater than the total number of subsystems.
- A request for processing (on behalf of an SSID) was processed before notification was received that it should be part of merge processing.
- The buffer being processed has a Log Sequence Number that is smaller than the previous buffer with the same PRILOG time.
- Data was received for an SSID whose log data already ended.

Modules: FDRRVLM0

020 Invalid end of merge

The Recovery Data Manager is passed an invalid merge id for an end of merge for SSID call.

Modules: FDRRVLM0

0388

Explanation: This abend indicates an RSR initialization failure. DFSIINB0 detected an IMS internal error during IMS Transaction Manager initialization of an RSR-capable system. Further initialization cannot continue. Register 15 contains the following abend subcodes:

Subcode	Explanation
X'04'	USERVAR was not specified in the DFSHSBxx member of IMS.PROCLIB or as an execution parameter override.
X'08'	The value specified on the MTOID parameter in the DFSRSRxx member of IMS.PROCLIB was not recognized. Valid values are 1, 2, or 3.
X'0C'	Username3 was not specified in the APPLID parameter of the COMM macro, and the APPLID3 parameter was blank. Either username3 or APPLID3 must be specified for the RSR tracker.

System Action: IMS terminates abnormally

Programmer Response: Correct the appropriate system parameter.

0390

Explanation: This abend is a standard abend issued by module DFSXLUM0 during IMS initialization. A nonzero return code was returned after DFSBCB GET, IMODULE GETMAIN, DFSCIR, IMODULE LOAD, or IPOST was issued. For more information, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: IMS terminates abnormally.

Problem Determination: 4, 33

0391

Explanation: This abend is a standard abend issued by module DFSXRM00 during IMS initialization. A nonzero return code was returned after DFSBCB GET, IMODULE GETMAIN, DFSCIR, or IPOST was issued. For more information, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: IMS terminates abnormally.

Problem Determination: 4, 33

0392

Explanation: This abend is a standard abend issued by module DFSXTMC0 during IMS initialization. A nonzero return code was returned after DFSBCB GET, IMODULE GETMAIN, DFSCIR, IMODULE LOAD, or IPOST was issued. For more information, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: IMS terminates abnormally.

Problem Determination: 4, 33

0393

Explanation: This abend is a standard abend issued by module DFSXALM0 during IMS initialization. A nonzero return code was returned after DFSBCB GET, IMODULE GETMAIN, DFSCIR, or IPOST was issued. For more information, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: IMS terminates abnormally.

Problem Determination: 4, 33

0394

Explanation: This abend is a standard abend issued by module DFSXALC0 during IMS initialization. A nonzero return code was returned after DFSBCB GET was issued. For more information, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: IMS terminates abnormally.

Problem Determination: 4, 33

0396

Explanation: This abend is a standard abend issued by module DFSXXCF0 during IMS initialization. A nonzero return code was returned after DFSBCB GET, IMODULE GETMAIN, DFSCIR, or IPOST was issued. For more information, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: IMS terminates abnormally.

Problem Determination: 4, 33

0402

Explanation: An unauthorized program attempted to use the IMS SVC interface, an invalid call was passed to the SVC interface by IMS, or the IMS control region has terminated.

An abend U0402 might occur after an abend in a message region or a batch message region if the control region has terminated.

This user abend might also occur when an invalid PCB address is passed on a DL/I call. It can be interpreted as a Fast Path PCB when Fast Path is not in the system.

System Action: If IMS attempted to use the SVC, IMS terminates abnormally. If a user program attempted to use the SVC, the user program terminates abnormally.

Programmer Response: If a user attempted to use the SVC, contact the IMS system programmer for assistance.

Problem Determination: 1, 4, 11, or 35

0403

Explanation: This abend is issued by module DFSAOS70 during batch processing. The OSAM batch interface to the I/O driver encountered an invalid parameter or control block associated with the I/O call. Register 14 in the abend SVRB registers will contain the address of the location that encountered the error.

System Action: IMS is abnormally terminated.

Programmer Response: Contact the IMS system programmer for assistance.

Problem Determination: 1, 4, 11

0404

Explanation: This abend is issued by DFSQSPC0 user exit when a request to callable services for working storage fails. Module DFSQSPC0 is the Queue Control Facility (QCF) version of the Queue Space Notification Exit. Register 14 contains the callable services error code (CSPLRTRN) and register 15 contains the callable services return code.

System Action: IMS terminates abnormally.

Programmer Response: Contact the system programmer to analyze the return codes.

Module: DFSQSPC0

Problem Determination: 1, 4

0405

Explanation: The dependent region was placed in a wait state by DFSQSPC0, the Queue Control Facility (QCF) version of the Queue Space Notification Exit. The wait state occurred based on IMS queue usage, which exceeded the user or default limits. The user defined response in QCF was to abend the application to stop the application from further IMS queue usage.

System Action: The application terminates abnormally.

Programmer Response: Analyze the application to determine why it is using excessive queue space, and make the necessary corrections.

Module: DFSQSPC0

0406

Explanation: The dependent region was placed in a wait state by DFSQSPC0, the Queue Control Facility (QCF) version of the Queue Space Notification Exit. The wait state occurred based on IMS queue usage, which exceeded the user or default limits. While in this wait state, the dependent region was invalidly posted to by a source other than QCF or a /PSTOP or /STOP command. Register 4 contains the post code.

System Action: The dependent region terminates.

System Programmer Response: This abend occurred due to an internal error. Contact the IBM Support Center for assistance.

Module: DFSQSPC0

0407

Explanation: Module DFSILTA0 was unable to get enough storage to build queue entries.

System Action: DFSILTA0 terminates abnormally.

Programmer Response: Rerun the job in a larger region or code the ST parameter on the EXEC statement to process for a shorter time.

Problem Determination: None.

0408

Explanation: The dependent region was placed in a wait state by DFSQSPC0, the Queue Control Facility (QCF) version of the Queue Space Notification Exit. The wait state occurred based on IMS queue usage, which exceeded the user or default limits. While the dependent region was in a wait state, a /STOP or /PSTOP command was entered against the region. See message DFS0528I for additional information.

System Action: The application terminates abnormally.

Programmer Response: Analyze the application to determine why it is using excessive queue space, and make necessary corrections.

Module: DFSQSPC0

0409

Explanation: The dependent region was placed in a wait state by DFSQSPC0, the Queue Control Facility (QCF) version of the Queue Space Notification Exit. The wait state occurred based on IMS queue usage, which exceeded the user or default limits. While the dependent region was in this wait state, an invalid QCF action was received.

System Action: The application terminates abnormally.

System Programmer Response: This abend occurred due to an internal error in QCF or IMS. Contact the IBM Support Center for assistance.

0411

Explanation: Open failed for a data set noted in Message DFS0411I.

System Action: The log transaction analysis program (DFSILTA0) terminates abnormally.

Programmer Response: See Message DFS0411I to identify the data set.

Problem Determination: Check the JCL for the ddname in Message DFS0411I. Correct the JCL, and resubmit the job.

0413

Explanation: The limit of the internal table of 255 application programs running at once has been exceeded. This is an IMS system error.

System Action: The log transaction analysis program, DFSILTA0, terminates abnormally.

Programmer Response: Ensure that the log data set used as input to program DFSILTA0 contains valid IMS log records.

Problem Determination: Save the storage dump of the abend and input log data sets. 1, 2, 3, 4, 8, 25, 35

0415

Explanation: This abend accompanies the DFS0408I or DFS0409I message, indicating an invalid parameter on the EXEC statement.

System Action: The log transaction analysis program, DFSILTA0, terminates abnormally.

Programmer Response: Check the associated message to identify the invalid parameter.

Problem Determination: Correct the JCL, and resubmit the job.

0427

Explanation: A logical error occurred while processing a VSAM database. Refer to Message DFS0427I for a detailed description. If DUMP=YES is specified on the DL/I buffer options statement, the IMS control region will abend when the error is encountered.

System Action: The application program terminates abnormally.

Programmer Response: None.

Problem Determination: 4, 35

0428

Explanation: A batch message processing (BMP) step or a Fast Path (IFP) region could not be initiated because the PSB named in the third positional operand of the PARM field on the EXEC control statement was not defined at system definition time.

System Action: The BMP or IFP region is terminated abnormally.

Programmer Response: Get a list of PSBs defined at IMS system definition and find the correct name of the one desired. Correct the PSB name in the third positional operand of the PARM field on the EXEC statement, and resubmit the BMP for execution.

Problem Determination: 2, 3, 10

0430

Explanation: Module DFSDVBI0 determined that the DL/I database buffering services function cannot be initialized. Message DFS0430I is issued and the reason code in the message defines the reason for the failure.

System Action: IMS terminates abnormally. One or more messages are issued to indicate the reason for the failure.

Programmer Response: See message DFS0430I.

Problem Determination: 1, 2, 3, 18, 19

0432

Explanation: A batch message processing (BMP) program step could not be scheduled. The requested PSB was defined as a teleprocessing program, but the BMP step is message-driven, and the parallel option was specified.

System Action: The BMP region is terminated abnormally.

Programmer Response: Get a list of program names generated at IMS system definition and find the correct name of the program to be executed. Then, correct the program names in the PARM field of the EXEC statement, and resubmit the BMP for execution.

Problem Determination: None.

0436

Explanation: A batch message processing (BMP) program step could not be scheduled because the input symbolic queue named in the fourth positional operand of the PARM field on the EXEC control statement was not defined to system definition.

System Action: The BMP region is terminated abnormally.

Programmer Response: Get a list of input symbolic names defined at IMS system definition, and correct the name. Then, correct the input symbolic queue named in the EXEC statement, and resubmit the BMP for execution.

For Database Control (DBCTL) subsystems, message-driven BMPs are not allowed and you should not specify an input symbolic queue name.

Problem Determination: None.

0437

Explanation: If SMU is active, then the Application Group Name or resources specified are not valid for this dependent region. If RAS security is used instead of SMU, then there are IMS resources (transaction, PSBs, and LTERMs) that are not valid for this dependent region.

System Action: The dependent region is terminated.

Programmer Response: None.

Problem Determination: 1, 4, 6, 35

0438

Explanation: The ODBA User request to schedule the PSB named on the APSB call failed SAF RACROUTE processing.

System Action: The APSB request is unsuccessful. Message DFS2855A is issued if the SAF RACROUTE AUTH call was not successful.

Programmer Response: None.

Problem Determination: 1, 2, 4, 6, 11, 35, 36

0440

Explanation: A batch message processing (BMP) program step could not be initiated because the input symbolic queue named in the fourth positional operand of the PARM field on the EXEC control statement was not a transaction code.

System Action: The BMP region is terminated abnormally.

Programmer Response: Get a list of transaction codes defined at IMS system definition, and select a valid code. Then, change the input symbolic queue name on the EXEC statement to a transaction code, and resubmit the BMP for execution.

Problem Determination: None.

0442

Explanation: Before writing a VSAM control interval, the Record Definition Field (RDF) and the Control Interval Definition Field (CIDF) were checked and found invalid or inconsistent with the record format required by IMS.

System Action: The application program terminates abnormally.

Programmer Response: Refer to message DFS0442A.

0444

Explanation: A batch message processing (BMP) program step could not be scheduled because the output symbolic queue named in the fifth positional operand of the PARM field on the EXEC statement was not defined to system definition.

System Action: The BMP region is terminated abnormally.

Programmer Response: Get a list of logical terminal names and transaction codes defined at IMS system definition, and select the right one. Then, correct the output symbolic queue name on the EXEC statement, and resubmit the BMP for execution. You cannot specify a remote LTERM (CNT) on the OUT parameter.

If the subsystem is Database Control (DBCTL), message-driven BMPs are not allowed and you should not specify an output symbolic queue name.

Problem Determination: None.

0448

Explanation: A batch message processing (BMP) program step could not be initiated because the input transaction code named in the third positional operand of the PARM field on the EXEC control statement specified a remote SMB.

System Action: The BMP region is terminated abnormally.

Programmer Response: Check the transaction codes defined at IMS system definition. Then, select a transaction code that is not a remote SMB and resubmit the BMP for execution.

0451

Explanation: A physical input or output error occurred on a database data set. Message DFS0451I or DFS0451A was issued.

When the PSB for the program that terminated abnormally was generated, the IOEROPN parameter was specified on the PSBGEN macro statement. Either IOEROPN=451 was specified and the step is terminating after an I/O error, or IOEROPN=(n,WTOR) was specified and the operator responded ABEND to the DFS0451A message.

Note: If n=451, IMS terminates with abend U0451, even if the operator responds CONT to the DFS0451A message.

System Action: The application program terminates abnormally with pseudoabend U0451, and IMS continues processing. If DUMP=YES was specified on the DL/I buffer options statement, the application terminates with standard abend U0451.

Programmer Response: See message DFS0451I or DFS0451A.

Problem Determination: 1, 2, 3, 5, 8, 11, 17a, 17d, 17g, 20, 35

0452

Explanation: A batch message processing (BMP) program step could not be initiated because the transaction named in the fourth positional operand of the PARM field on the EXEC control statement has been stopped or locked by a command or by a prior program failure.

System Action: The BMP region is terminated abnormally.

Programmer Response: Start the transaction again and resubmit the job.

Problem Determination: None.

0453

Explanation: A BMP program step cannot be initiated because the transaction code specified in the fourth positional operand of the PARM field on the EXEC statement is an LU 6.2-driven dynamically built transaction or an IMS conversational transaction.

System Action: The BMP region is terminated abnormally.

Programmer Response: Ensure that the transaction code specified in the fourth positional operand of the PARM field on the EXEC control statement is not a LU 6.2-driven dynamically built transaction or an IMS conversational transaction.

0454

Explanation: One of the following occurred:

- An attempt was made to schedule a dependent region after a `/CHE FREEZE` or `/CHE DUMPQ` command was issued.
- A BMP or MPP was started after a shutdown checkpoint had already quiesced and stopped all other active regions.
- A BMP or IFP scheduling detected an IRLM that is not available and scheduling cannot continue.
- A BMP or IFP scheduling that was prestarted on the alternate IMS in an XRF environment has been terminated by a `/STOP BACKUP` command. Scheduling did not complete.
- BMP or IFP scheduling that was prestarted on the alternate IMS in an XRF environment has been terminated by a `/STOP BACKUP` command issued on

| the alternate IMS or /CHE FREEZE command issued on
| the active IMS and PSDEPAB=YES in the
| DFSHSBxx member. Scheduling did not complete.

System Action: The dependent region is terminated abnormally.

Programmer Response: Resubmit the job when IMS is started or restarted.

0456

Explanation: A DL/I batch region, a batch message processing (BMP) program step, or a Fast Path (IFP) region could not be initiated because the PSB named in the third positional operand of the PARM field on the EXEC control statement has been stopped or locked by a command or by a prior program failure.

This abend can also occur when:

- A batch region, BMP, or IFP attempts to reference a PSB that is in NOTINIT status. Some possible causes for NOTINIT status are:
  - The PSB was not in the ACBLIB during initialization.
  - The PSB references a DBD that is not defined to IMS.
  - BLDL failed for the PSB
- The PSB referenced was defined as DOPT and was found in the first concatenation of ACBLIB.
- A Fast Path PCB referenced a DBD that was not found in the system.
- A main storage database (MSDB) referenced by a Fast Path PCB could not be loaded during IMS initialization because member DBFMSDBX was not found in PROCLIB or that MSDB was not specified in member DBFMSDBX.
- A DEDB randomizing module referenced by a Fast Path PCB could not be loaded during IMS initialization.
- A PSB could not be scheduled because the DMB pool is too small, and the PSB requires a DMB that is exclusively allocated to another PSB.
- The PROCOPT specified is incompatible with the calls being issued.

System Action: The batch region or BMP or IFP region is terminated abnormally. The missing PSB was noted in message DFS830I, which was issued during initialization. DFS563I might also be issued during initialization.

Programmer Response: Analyze why the PSB is locked or stopped. After the problem that caused the failure has been corrected and the PSB has been unlocked, resubmit the job.

To unlock the PSB for a BMP program or an IFP non-message-driven or a DEDB utility program, issue a /START PROGRAM command, with the PSB name, before resubmitting the job.

0457

Explanation: A batch message processing (BMP) or a Fast Path (IFP) region was started for a PSB already scheduled in another region.

System Action: The BMP or IFP region was terminated abnormally.

Programmer Response: Determine the reason for the duplicated PSB specification. If this is not a duplication of a current job, resubmit the job when the current job is complete, or correct the PSB with a parallel scheduling option at IMS system definition.

Problem Determination: None.

0458

Explanation: A batch message processing (BMP) program step or a Fast Path (IFP) region was not initiated because one of the Fast Path databases used by the PSB named in the third positional operand of the PARM field on the EXEC control statement was stopped or locked by a prior program failure.

If a Fast Path online utility is initiated, the database named in the second positional operand of the PARM field on the EXEC control statement has been stopped or has not been defined as a DEDB in the DBDGEN.

System Action: The BMP or IFP region is terminated abnormally.

Programmer Response: Determine the reason for the Fast Path database being stopped. After the problem that caused the database to be stopped has been corrected, resubmit the job.

Problem Determination: None.

0462

Explanation: An application program was scheduled in a message region and terminated without successfully issuing a GET UNIQUE for an input message. The application program did successfully process at least one other call.

System Action: The application program is abnormally terminated, and the PSB and the SMB are stopped.

Programmer Response: Determine the problem in the user message processing program, correct it, and resubmit the job.

0474

Explanation: An application program has been terminated through the use of the /STOP REGION ABDUMP or /STOP REGION CANCEL command.

System Action: The region is abnormally terminated in response to a user request.

Programmer Response: None.

Problem Determination: None.

0475

Explanation: A Java application program attempted to run as an IMS batch job. IMS batch does not support Java application programs.

System Action: The batch program terminates abnormally.

0476

Explanation: A DL/I call does not include a valid PCB address. The PCB address in the DL/I call (second parameter or third, if count is the first parameter) is not one of the PCB addresses passed to the application program at its entry point.

Some possible causes for this failure are:

- An address for an AIB was provided but the first eight bytes of the block do not equal 'DFSAIB'.
- The PSB language specified is not the same as that of the application program.
- The call requires a PCB address, but the function is the last entry in the call list.
- The address of the PCB in the call is not one of the PCB addresses passed to the application at its entry point.
- An online program issued an UNLD call. The UNLD call is an internal DL/I call and should never be issued by an application program.

This abend can be the result of an improperly assembled or generated application program.

System Action: The application program terminates abnormally.

Programmer Response: Correct the parameter list and resubmit the job.

- Change the PSB language specified to that of the application program.
- Correct the application program DL/I call statements.

Problem Determination: 4, 17d

0477

Explanation: Because the primary area to build FLD blocks was not large enough, an IGETBUF macro was issued to obtain a 8192-byte area for FLD blocks. The area was not available. In batch processing, a GETMAIN obtains the space. In online processing, the space is obtained from the database working pool.

System Action: The application program is terminated abnormally.

Programmer Response: For batch processing, provide a larger address space. For online processing, provide a larger database working pool.

Problem Determination: 13, 17a, 17b

0478

Explanation: A DL/I call exceeded the maximum allowable number of qualification statements which make up the segment search arguments on a single DL/I database call. The maximum number of qualification statements for a single DL/I call is 1024.

System Action: The application program terminates abnormally.

Programmer Response: You must modify the program so that it does not exceed the limit of 1024 qualification statements on a single DL/I call.

Problem Determination: 11, 17a 17b.

0479

Explanation: A nonzero return code was returned from a STAT call to the buffer handler to get buffer pool statistics.

System Action: The application program is terminated abnormally.

Programmer Response: This is probably an IMS internal error.

Problem Determination: 17a, 17b, 35

0481

Explanation: IMS was unable to build a recoverable in-doubt structure (RIS) to identify and save information about data in the in-doubt state. The system tries to build a RIS whenever a thread abends while owning in-doubt data. A subcode in register 15 further defines the problem. For the meaning of the subcode, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: The IMS control region terminates abnormally.

Problem Determination: 1, 4, 5, 35

0482

Explanation: A Coordinator Control (CCTL) subsystem issued an INIT call to connect to IMS DB/DC, but the IMS DB/DC system was not specified with the DL/I SAS option required for Database Control (DBCTL) subsystem support.

System Action: IMS terminated the CCTL connection process.

System Programmer Response: If you want DBCTL support, specify the DL/I SAS option for your IMS DB/DC system.

Problem Determination: 1, 5, 8, 25, 38

0484

Explanation: IMS started but was unable to complete the resynchronization process between a Coordinator Control (CCTL) subsystem and IMS. This process is initiated either when a connection between IMS and a CCTL occurs, or in response to an operator command. A subcode in register 15 further defines the problem. For the meaning of the subcode, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: The IMS control region terminates abnormally.

Problem Determination: 1, 4, 5, 36

0485

Explanation: In DFSDASD0, a request for storage for an AWE failed.

System Action: The dependent region is terminated.

Problem Determination: 4, 35

0499

Explanation: The maximum insert call count was exceeded and the application received an 'A7' status code. The application then attempted to issue another insert and was terminated abnormally with a U0499.

System Action: The application program is abnormally terminated, and the PSB is stopped.

Programmer Response: Check the application program and make sure it recognizes an 'A7' status code, or increase the maximum insert count specified in the TRANSACT macro at system definition.

Problem Determination: Application dump and IMS system definition listing.

0500

Explanation: IMS was unable to find the DEB pointed to by the 7770-3 DCB by following the TCB DEB chain. This was probably caused by an IMS or host system error.

System Action: IMS terminates abnormally.

Programmer Response: Contact your IBM Support Center for assistance.

Problem Determination: 1, 6, 10, 11, 35

0501

Explanation: The device-dependent module for the 3270 remote or 3275 dial terminal detected an undetermined problem.

System Action: An abend instruction has been issued to produce a dump.

Programmer Response: Determine the cause of the failure. If the problem was caused by an IMS failure, contact the IBM Support Center for assistance. If the problem was caused by user modifications or hardware, correct the problem, and retry the failing operation.

Problem Determination: 4, 6, 7

0502

Explanation: The IMS graphics attention handler routine in DFSDN070 has attempted to post a 2260 local CLB, but the DECB was being used by the control region even though the idle flag (CLB2IDLE) was on. This is an IMS system error.

System Action: IMS terminates abnormally. The z/OS system continues with the next job, if any.

System Operator Response: IMS can be restarted using the emergency restart procedures or with a cold start.

Problem Determination: 4, 35

0503

Explanation: The routine that marks PTERMs inoperable has detected the CTB for the PTERM is not on the same line as the communications task. Register 9 points to the CLB for the line and register 7 points to the CTB for the failing PTERM.

System Action: IMS terminates abnormally.

System Operator Response: Restart IMS. If the error persists, the DD statement for the failing line should be removed in order to continue processing until the failure is corrected.

Problem Determination: 5, 11, 35

0504

Explanation: The IMS switch line connect/disconnect processor module (DFSICLA0) has detected an error in a call to the queue manager while attempting to delete messages belonging to an inquiry logical terminal on a switched line. This is an IMS system error.

System Action: The IMS control region is abnormally terminated.

Problem Determination: 4 and 35. The return code from DFSQMGR0 is in register 2.

0505

Explanation: IMS attempted to acquire storage for a new 7770-3 DEB in subpool 230, key 5. Virtual storage was not available to satisfy the request.

System Action: IMS terminates abnormally.

System Operator Response: Increase the region size the next time the IMS control region is started.

Problem Determination: 1, 4, 8, 11

0506

Explanation: One of two types of error occurred:

If register 6 is zero

All log data sets were read in the backward direction to EOF, but a stopping point for the backout of one of the recovery tokens was not found. A stopping point was found during the forward read of the log data sets. Three possible reasons for the error are:

- The log data sets are on unlabeled tapes, and the operator did not mount the same tapes during the backward and forward read.
- The input log is a multi-volume DASD data set.

If register 6 is not zero

A data space management error occurred. Register 6 contains the address in module DFSBACK0 where the error was detected. Register 15 contains the return code from the data space management module, DFSRVSP0. The return codes from module DFSRVSP0 are:

12 Unable to obtain RVDL block

16 Unable to obtain data space

20 Unable to extend data space

24 Bad data space reference (bad token)

28 Bad length for retrieve

32 Unable to get ALET

System Action: IMS terminates abnormally.

Programmer Response:

If register 6 is zero

- If the log data sets are on unlabeled tapes, make sure the operator mounted the same tapes for the forward and backward reads.
- If a model DSCB name was specified for a multi-volume tape data set, run the Database Recovery utility for each modified database, but exclude the Batch Backout output log. Remove the reference to the model DSCB name from the DD statement for the input log, and rerun Batch Backout.

If register 6 is not zero

Call the IBM Support Center.

0507

Explanation: You selected the abend option for the Batch Backout utility.

System Action: After processing is complete, the utility terminates abnormally with a dump.

0509

Explanation: The message generator module (DFSCLMO0) found an invalid SYSID while building a response message for an IMS command.

System Action: IMS terminates abnormally.

Programmer Response: The problem probably originated in the IMS system code.

Problem Determination: 4, 35

0511

Explanation: A conversational processing error occurred. Either an invalid buffer request has been specified or a request to free a conversation was made when no conversation was active. This is probably an IMS system error.

System Action: IMS terminates abnormally.

Programmer Response: None.

Problem Determination: 1, 4, 6, 25, 26, 35

0513

Explanation: An overlay of one of the Transaction Manager (TM) buffer pools (CIOP, HIOP, or SPAP) might have occurred. In Fast Path, a storage overlay of the Fast Path segment compression work area (SEG1 or SEG2) might have occurred. The error might be caused by one of the user's TM exits or edit routines, an access method (such as BTAM or VTAM), or an error in IMS code. The reason code in register 15 provides additional information in diagnosing the cause of this failure. For the meaning of the codes, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: IMS terminates abnormally or, in the case of a potential overlay of a Fast Path work area, the dependent region is terminated abnormally.

Problem Determination: 4, 35

0516

Explanation: More than one input and one output logical terminal are in conversation on the same physical terminal.

System Action: The IMS control region terminates abnormally.

Programmer Response: Ensure that only one input and one output logical terminal on the same physical terminal are concurrently in a conversation. One of them represents the logical input terminal, and the other represents the logical output terminal.

Problem Determination: 1, 4, 25, 26, 35

0517

Explanation: An invalid format descriptor was encountered as a result of attempting to convert to an unpacked format from the SPA.

System Action: The region in which the error occurred terminates abnormally.

Problem Determination: 1, 4, 6, 25, 26, 35

0519

Explanation: The message router, DFSICLR0, was called with an invalid enqueue request. Register 8 provides a reason code. For a description of the reason code and additional information, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: The multiple systems VS control region terminates abnormally.

Problem Determination: 1, 4, 5, 6, 10, 12, 35

0525

Explanation: One of the following problems occurred:

- The hardware clock is inoperable.
- IMS initialization detected that the GMT offset value is outside the valid range, and the operator replied `A` (for abort) to message DFS0477A.

At the time of abend, register 15 contains the reason code. For the meaning of the code, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: IMS terminates abnormally, or issues message DFS0478A until the problem is corrected.

Programmer Response: Contact the IBM Support Center for hardware or software support, or follow the instructions in the operator response in message DFS0477A or DFS0478A.

0545

Explanation: During log type 2702 record processing on the alternate, an inconsistent state between the active and the alternate's data set extent information existed at the completion of the pseudo-extend.

System Action: The IMS alternate system abends.

Master Terminal Operator Response: Restart the IMS alternate system.

0551

Explanation: GSAM PCBs were present, but the dependent region was not a BMP.

System Action: The dependent region terminates abnormally.

Programmer Response: The application was incorrectly defined. Identify it as a BMP.

0552

Explanation: A conversational MPP terminated abnormally in a multiple systems environment. The SPA cannot be sent to the input terminal system where the conversation is controlled, because no MSNAME exists for the input SYSID. The input SYSID is used for responses.

System Action: The IMS control region terminates abnormally.

Programmer Response: Provide MSNAME in the abending system for input SYSID.

Problem Determination: 1, 4, 5, 6, 10, 12, 35

0553

Explanation: Module DFSCMM20 posted the link between two main storage-to-main storage IMS systems with a write completion code, but an input/output operation was already in progress. This is an invalid situation, as input/output activity is handled synchronously on the link.

System Action: IMS terminates abnormally.

Problem Determination: 1, 4, 25, 35

0554

Explanation: The post handler module (DFSCMM20) received a read attention indicator on the main storage-to-main storage link. This is an invalid request.

System Action: IMS terminates abnormally.

Problem Determination: 1, 4, 25, 35

0555

Explanation: Module DFSCMM20 posted the main storage-to-main storage link with a post code other than a write or read attention while IMS was preparing to do an input/output operation on that link.

System Action: IMS terminates abnormally.

Problem Determination: 1, 4, 25, 35

0556

Explanation: Module DFSCMM20 posted the main storage-to-main storage link with an error post code because of a previous input/output operation.

System Action: IMS terminates abnormally.

Programmer Response: Bring up IMS again, and continue to run the job. If the problem persists, contact the IBM Support Center for assistance.

Problem Determination: 1, 4, 25, 35

0557

Explanation: During restart processing, module DFSCMR00 validates a multiple systems environment. An address for the logical link blocks does exist, but an address for the logical control blocks does not exist in the system contents directory.

System Action: IMS terminates abnormally.

Problem Determination: 1, 4, 6, 35

0560

Explanation: In attempting to acquire a buffer, the message generator received an invalid return code from the queue manager. For the meaning of the code, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: IMS terminates with a dump.

Programmer Response: Examine register 15 in the dump to isolate the queue manager's return code. The return code will identify the problem.

Problem Determination: 1, 4, 5, 6, 35

0561

Explanation: The link number assigned to the link control block at system initialization must be at least 1, but was 0.

System Action: IMS terminates abnormally.

Programmer Response: Investigate any application program that might obtain access to the IMS control region to ensure proper addressability throughout the module.

Problem Determination: 1, 4, 5, 6, 35

0562

Explanation: This is a main storage-to-main storage buffer incompatibility. An IMS main storage-to-main storage system has transmitted more data than its counterpart's input buffer can hold. Buffer lengths should be identical.

System Action: IMS terminates abnormally.

Programmer Response: Ensure that main storage-to-main storage input/output buffers have the same length.

0563

Explanation: During system restart, all the link control blocks are reconnected to the logical link blocks, as they were before the system came down. All link numbers are set relative to 1, but one of the link control block numbers is 0.

System Action: IMS terminates abnormally.

Programmer Response: Ensure that the link number is correct during restart.

Problem Determination: 4, 35

0564

Explanation: A device-dependent module called the communication analyzer (DFSICIO0) to obtain an extra input/output work buffer. An extra buffer already exists.

System Action: IMS terminates abnormally.

Problem Determination: 1, 4, 5, 6, 35

0566

Explanation: An internal logic error was detected while processing an internal and remote command. A message queue buffer might have been destroyed.

System Action: IMS terminates abnormally.

Programmer Response: None required.

Problem Determination: 35

0567

Explanation: The communication analyzer detected an I/O error condition in sending the IMS Ready message to the system console.

System Action: IMS terminates abnormally.

Programmer Response: None.

Problem Determination: 23, 35

0568

Explanation: The communication initialization module (DFSCINB0) received a nonzero return code from the queue manager in an attempt to acquire a buffer from the queue manager to transmit the IMS Ready message. Code is in register 15.

Code	Meaning
00	Buffer required
04	Incorrect length specified; no buffer acquired

System Action: IMS terminates abnormally.

Programmer Response: None.

Problem Determination: 23, 35

0572

Explanation: The length of an inner segment of a multi-segment pre-edit message is a negative value. This is invalid.

System Action: IMS terminates abnormally.

Problem Determination: 4, 35

0573

Explanation: The length of an inner segment of a multi-segment message is larger than the total length of the message. One of the length fields is incorrect.

System Action: IMS terminates abnormally.

Problem Determination: 4, 35

0574

Explanation: The Fast DB Recovery region encountered an error. A message describing the error precedes this abend code.

System Action: The Fast DB Recovery region terminates abnormally.

System Operator Response: See the operator response of the message issued before this abend.

0577

Explanation: This abend occurred because input processing was selected for a VTAM terminal, but VTAM support was not generated for DFSICIO0.

System Action: IMS terminates abnormally.

System Programmer Response: Verify "DFSVTAM COPY" for the global &DFSVTAM=N; If VTAM support is required, add the COMM macro to the IMS system definition.

0578

Explanation: This abend occurred because the CTT device type (CTTDEVIC) was either in binary zeros or the value was less than the system console (X'33'). CTTDEVIC is picked up and examined for each defined terminal during Transaction Manager initialization (control TCB). IMS terminal device types begin with number 1.

Both of the above conditions are obvious errors and are probably caused by one of the following conditions:

1. The stage 2 assembly of DFSCLL0x had an error.
2. The link edit of DFSCLL0x had an error.

Note: The x value in the module name indicates the nucleus suffix.

System Action: IMS terminates initialization processing.

System Operator Response: Ensure that the stage 2 assembly of DFSCLL0x produced acceptable output and that the subsequent link edit occurred without errors. Notify the appropriate system programmer to correct the IMS problem.

Problem Determination: 1, 4, 6, 35

0579

Explanation: The control region initialization was unable to successfully open any line groups. DFSIINB0 has detected an internal IMS error during IMS Transaction Manager initialization. Further initialization cannot continue.

System Action: IMS terminates abnormally.

Programmer Response: Ensure the correct IMS control blocks were linked into the IMS nucleus.

Problem Determination: 1, 4, 6, 35

0580

Explanation: Either DFSIINB0 detected an IMS internal error during IMS Transaction Manager initialization, or DFSDINB0 detected an IMS internal error during initialization of a Database Control (DBCTL) subsystem. Initialization cannot continue.

System Action: IMS terminates abnormally.

Programmer Response: None.

Problem Determination: 1, 4, 6, 35

0581

Explanation: DFSIINB0 or DFSIINV0 detected an internal IMS error during IMS Transaction Manager initialization. Initialization cannot continue. For more information, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: IMS terminates abnormally.

Programmer Response: Be sure the correct IMS control blocks were linked into the IMS nucleus. If the blocks were linked correctly, contact the IBM Support Center for help in determining the problem.

Problem Determination: 1, 4, 6, 35

0582

Explanation: DFSIINB0 detected an internal IMS error during IMS Transaction Manager initialization. Initialization cannot continue. The DFSBCB operation

was unable to obtain storage for a VTAM Receive Any buffer.

System Action: IMS terminates abnormally.

Programmer Response: Check the following:

- The number of VTAM Receive Any buffers specified in the RECA keyword of the EXEC parameter
- The number and size of the VTAM Receive Any buffers in the RECANY parameter of the IMS system definition COMM macro.

Problem Determination: 1, 4, 6, 10, 35

0583

Explanation: System definition was performed without VTAM; however, the SCD control block indicates that VTAM control blocks exist.

System Action: IMS terminates abnormally.

Programmer Response: Ensure the correct SCD was linked into the IMS nucleus.

Problem Determination: 1, 4, 6, 35

0584

Explanation: An error situation was detected by the Automated Operator Interface Message Generator. Register 5 contains the address in the module where the error was detected. Register 2 contains a code indicating the reason for the ABEND. For the meaning of the code, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: The IMS control region is abnormally terminated.

System Console Operator Response: Perform an emergency restart.

Problem Determination: 1, 4, 5, 6, 35

0585

Explanation: An error occurred during initialization of the XRF-capable IMS system. The subcode in register 15 indicates the specific problem. For the meaning of the code, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: The control region is terminated abnormally.

Programmer Response: If register 15 = 1, correct the HSBID parameter value in the EXEC statement of the control region execution procedure. If register 15 = 2, contact your IBM Support Center for assistance.

Problem Determination: 1, 2, 3, 4, 6, 35

0586

Explanation: One of the following errors occurred during initialization of an XRF-capable IMS system:

- The system detected an invalid value on the HSBID parameter on the EXEC statement of the control region. Only HSBID=1, HSBID=2, or HSBID=null is allowed. HSBID=null deactivates the XRF capability.
- The DFSHSBxx member of the procedure library could not be opened.

System Action: The control region is terminated abnormally.

Programmer Response: For the first error, correct the HSBID parameter; for the second error, correct the HSBMBR parameter. Refer to *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis* to determine which of the errors occurred.

Problem Determination: 1, 2, 3, 4, 6, 35

0587

Explanation: The Fast Path emergency restart routine (DBFERST0) received a nonzero return code from the DEDB forward recovery routine (DBFERS10).

System Action: The control region is terminated abnormally.

Programmer Response: For the return codes and their meanings, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

Problem Determination: 1, 4, 6, 35

0588

Explanation: An attempt to load and link to user-written, dependent-region, pre-initialization routines failed.

System Action: The dependent region is terminated abnormally.

Programmer Response: This abend is preceded by message DFS3848 or DFS3849. In either case, a BLDL macro instruction detected the problem. BLDL searches the link library and the job or step library. Either the modules listed in the error message was not found in any of these libraries or an I/O error occurred while searching one of these libraries.

Problem Determination: 1, 2, 3, 6, 11, 35

0589

Explanation: An internal system error occurred. Either a request to I/O toleration services for an extended error queue element (EEQE) control block failed, or a request to get or release an asynchronous work element (AWE) failed.

System Action: The control region is terminated abnormally.

Programmer Response: For the return codes and their meanings, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

Problem Determination: 1, 2, 3, 4, 6, 15, 35

0590

Explanation: VTAM or the IRLM failed in the XRF complex where the IMS alternate system was running.

System Action: The control region terminates abnormally.

Programmer Response: Correct any errors that caused VTAM or IRLM to fail; then restart the alternate IMS system.

Problem Determination: 1, 2, 3, 4, 6, 35

0591

Explanation: An error occurred while attempting to enqueue or dequeue a Fast Path resource. This is an internal IMS error.

System Action: The control region terminates abnormally.

Programmer Response: For the return codes and their meanings, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

Problem Determination: 1, 2, 3, 4, 6, 35

0592

Explanation: IMS was unable to get a data entry database (DEDB) area lock. This is an internal IMS error.

System Action: The control region terminates abnormally.

Programmer Response: For the return codes and their meanings, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

Problem Determination: 1, 2, 3, 4, 6, 35

0593

Explanation: A database block failure occurred during restart.

System Action: IMS terminates abnormally.

Programmer Response: A code in register 15 at the time of abend identifies the cause of the failure. For the meaning of the code, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

Take appropriate action according to the error code indicated above. CSA fragmentation might cause codes 3 and 4. In this case, re-IPL and rerun the job.

0594

Explanation: An internal system error occurred. A request to Storage Management Services for an RPST control block failed. The requester can issue an abend.

System Action: The control region terminates abnormally.

Programmer Response: For the return codes and their meanings see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

Problem Determination: 1, 2, 3, 4, 6, 15, 35

0595

Explanation: A GETMAIN request for main storage from subpool 231 failed.

System Action: The control region on the alternate system terminates abnormally.

Programmer Response: For the return codes and their meanings, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

Problem Determination: 1, 2, 3, 4, 6, 35

0596

Explanation: An internal system error occurred. This abend is issued by all IMS buffer tracking modules in an XRF complex or in a Fast Database Recovery region.

System Action: The control region on the alternate system terminates abnormally.

Programmer Response: For the return codes and their meanings, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

Problem Determination: 1, 2, 3, 4, 6, 15, 35

0597

Explanation: An internal system error occurred. This abend is issued by all IMS lock tracking modules in an XRF complex.

System Action: The control region on the alternate system terminates abnormally.

Programmer Response: For the return codes and their meanings, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

Problem Determination: 1, 2, 3, 4, 6, 15, 35

0598

Explanation: An inconsistency in the system data sets was found during the synchronization phase of an XRF complex or during emergency restart of an alternate system. Register 3 contains a character string indicating which system data set caused this problem. The possible data sets in error are: the RDSs, the MODSTATs, the QBLKs, the LGMSG-Qs, the SHMSG-Qs, and the MSDBs. For more information, refer to message DFS3889A and to *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: The control region terminates abnormally.

Programmer Response: Correct the control region JCL. See *IMS Version 9: Installation Volume 1: Installation Verification* for data set name and volume requirements for an XRF-capable IMS system.

Problem Determination: 1, 2, 3, 4, 6, 35

0599

Explanation: A page-fix or page-free error occurred during checkpoint of an XRF-capable IMS active system or in the synchronization phase of an XRF complex. The IMSAUTH PGFIX/PGFREE function passed a return code in register 15. For a description of these return codes, see Appendix C, “IMS System Services Return Codes,” on page 571.

System Action: The control region terminates abnormally.

Problem Determination: 1, 2, 3, 4, 6, 35

0600

Explanation: An error occurred in a DIAGNOSE-0 instruction while running an XRF-capable IMS system under VM.

System Action: The control region terminates abnormally.

Programmer Response: If the attempt to rerun your XRF-capable IMS system fails, contact your IBM Support Center for assistance.

Problem Determination: 1, 2, 3, 4, 6, 35

0601

Explanation: A failure occurred during a request for getting or freeing storage in the address space private area or CSA using IMODULE services.

System Action: IMS terminates abnormally.

Programmer Response: Increasing the region size or the size of CSA might be necessary. Register 15 contains the IMODULE return code. For an explanation of IMODULE return codes, refer to Appendix C, “IMS System Services Return Codes,” on page 571.

Problem Determination: 1, 2, 3, 4, 6, 35

0602

Explanation: A logic error occurred in the I/O toleration function of IMS. This abend is preceded by message DFS0612I, which contains the register 14 and register 15 return codes explaining the unexpected condition.

System Action: The control region terminates abnormally.

Programmer Response: See message DFS0612I for an explanation of the return codes.

Problem Determination: 1, 2, 3, 4, 6, 35

0603

Explanation: An error occurred when the alternate IMS system in the XRF complex loaded main storage databases (MSDBs) from the system log data set. A return code in register 15 indicates the reason for this error. See *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis* for a detailed description of the return codes.

System Action: The control region terminates abnormally.

Programmer Response: Correct any errors; then rerun the alternate system.

Problem Determination: 1, 2, 3, 4, 6, 35

0604

Explanation: The `/SWITCH SYSTEM FORCE (ACTIVE)` or `/SWITCH SYSTEM ACTIVE` command was entered from either the active or the alternate system in an XRF complex to request a takeover by the alternate system. Abend code U0604 is expected for the active system in response to this command.

System Action: The active system’s control region terminates.

Programmer Response: None required.

Problem Determination: None.

0605

Explanation: An unexpected condition occurred while attempting to release the scheduling serialization latch or the ACBLIB read serialization latch. The abend occurred because the latch is not owned, or the routine trying to release the latch is not the owner of the latch. This is an IMS system error. ABENDU0605 is issued by module DFSBML00 or DFSDBLR0. The program status

word (PSW) at entry-to-abend will isolate the failure to the specific module.

System Action: IMS terminates abnormally.

Problem Determination: 4

0606

Explanation: An unexpected condition occurred in the IMS IRLM suspend exit. This might be an IMS system error, or an unauthorized application program might be attempting to use the IMS cross-memory option. ABENDU0606 is issued by module DFSSUSX0.

System Action: IMS terminates abnormally.

Problem Determination: 4, 35

0608

Explanation: While the `/TRACE SET ON TRAP 2` command was enabled, IMS detected an overwrite of the MFS blocks, or the MOD and DOF failed block verification.

System Action: Recompile the Format or Test Format libraries.

Problem Determination: If an overwrite occurred, register 14 contains the location in the module where the overwrite was detected. If the MOD or DOF failed block verification, register 15 contains a debugging code. Refer to the *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis* for more information.

0611

Explanation: An invalid DOFFTYPE was found in DOFFLAG1 by one of the MFS output build modules (DFSCFE80 or DFSCFE90). This might be because the DOF:

- Was not built properly.
- Was overlaid in storage.
- Was modified improperly.

System Action: IMS terminates abnormally.

Programmer Response: None.

Problem Determination: 11, 16, 35. Register 11 contains the address of the message output descriptor (MOD) name in use when the error occurred.

0616

Explanation: A permanent I/O error occurred on the last remaining IMS log data set. If dual logging is in effect for IMS batch, this will occur when both of the log data sets are damaged. For IMS online, this will occur when the last remaining OLDS has a permanent I/O error or does not have enough space to complete a checkpoint freeze.

System Action: IMS terminates abnormally.

Programmer Response: Allocate new log data sets to replace the ones which have encountered I/O errors. It might be necessary to use the Log Recovery Utility to create log data sets free from write or close errors. When sufficient log data sets are available, emergency restart IMS to resume processing.

0622

Explanation: IMS attempted to initialize a non-control region with a protect key in the range 0-7. The CTL and CTX online control regions in z/OS are the only regions that can run under keys 0-7. For details, refer to the Procedures discussion in *IMS Version 9: Installation Volume 2: System Definition and Tailoring*.

System Action: IMS terminates the region that issued this abend.

Programmer Response: Correct the JCL and resubmit the job. Check with the z/OS system programmer to make sure that program DFSRRC00 is not specified to run under keys 0-7.

Problem Determination: 1, 2, 3, 4, 8, 35

0623

Explanation: IMS attempted to initialize an online control region in z/OS with a protect key in the range of 8-15; a key in the range of 0-7 is required.

System Action: IMS terminates the region that issued this abend.

Programmer Response: Correct the JCL and resubmit the job. Check with the z/OS system programmer to make sure that DFSMVRC0 is specified to run under keys 0-7, and that all JOBLIB data sets are APF-authorized.

Problem Determination: 1, 2, 3, 4, 8, 35

0624

Explanation: IMS received a nonzero return code from a DFSBCB request for AWE storage. The low-order 16 bits in register 15 contain the DFSBCB return code; the high-order 16 bits in register 15 might contain qualifying information. For an explanation of the DFSBCB return codes, see “DFSBCB Return Codes” on page 576.

System Action: IMS terminates abnormally with a dump.

Programmer Response: Take appropriate action based on the codes in register 15.

Problem Determination: 4, 11, 35

0630

Explanation: The initialization module DFSXCB00 issues this abend for any error that is encountered during processing. Register 14 contains the address in the module where the failure was detected. Register 15 contains a 4-byte return code consisting of a 1 to 3 character EBCDIC failure indicator followed by a hexadecimal return code. For an explanation of the values in register 15, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: IMS terminates abnormally.

Programmer Response: Determine the cause of failure as indicated by register 15, correct the problem, and resubmit the job.

For the meanings of the IMODULE and DFSBCB return codes, see Appendix C, “IMS System Services Return Codes,” on page 571.

If the abend occurred because of insufficient storage, increase private or CSA storage allocations as follows:

- To increase the size of private storage, increase the region size in the JCL.
- To increase the size of CSA, re-IPL z/OS, specifying a larger CSA allocation.

System Operator Response: Notify the system programmer.

Problem Determination: 1, 4, 5, 6, 7, 11, 35

0631

Explanation: A call was made to the IMS CREATE ITASK Processor using a DFSCIR macro to initialize an ECB. DFSCIR returned with a nonzero return code in register 15. indicating that the request could not be processed. For the meaning of the code, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: IMS terminates initialization processing with this abend.

Problem Determination: 1, 4, 6, 10, 11, 35

0632

Explanation: The EXEC statement PARM field contains too many positional parameters.

System Action: The region that issued this abend is terminated.

Programmer Response: Correct the JCL and resubmit the job.

Problem Determination: 1,2,3,4

0633

Explanation: The startup procedure for an IMS DL/I DBB region specified DBRC=C, but the MBR parameter did not specify DFSBBO00. DBRC=C is valid only for IMS Batch Backout.

System Action: IMS terminates abnormally.

Programmer Response: Correct either the DBRC parameter or the MBR parameter.

Problem Determination: 1, 2, 3, 4, 8

0634

Explanation: A positional parameter in the PARM field of the EXEC statement has one or more leading blanks.

System Action: The region that issued this abend is terminated.

Programmer Response: Correct the JCL and resubmit the job.

Problem Determination: 1, 2, 3, 4, 35

0638

Explanation: A comma was found within the extent of a fixed-length parameter.

System Action: IMS terminates abnormally.

Programmer Response: Correct the JCL, and resubmit the job.

Problem Determination: 1, 2, 3, 4

0640

Explanation: A required parameter was omitted for the kind of execution specified by the first 3 characters of the EXEC statement PARM field.

System Action: The region that issued this abend is terminated.

Programmer Response: Correct the JCL, and resubmit the job.

Problem Determination: 1, 2, 3, 4

0641

Explanation: The Database Recovery utility DFSURDB0 was executed in an invalid region type. The batch region type specified in the first subparameter of the //EXEC PARM field must be UDR.

System Action: IMS terminates abnormally.

Programmer Response: Correct the JCL and resubmit the job.

0642

Explanation: A parameter value, such as the program name in a DL/I execution, exceeds the maximum allowable length.

System Action: The region that issued this abend is terminated.

Programmer Response: Correct the JCL and resubmit the job, or reissue the START command specifying parameters with the correct length.

Problem Determination: 1, 2, 3, 4

0643

Explanation: A non-numeric value was specified for a numeric parameter.

System Action: The region that issued this abend is terminated.

System Programmer Response: Correct the EXEC statement parameter in the JCL, and resubmit the job.

Problem Determination: 1, 2, 3, 4, 8

0644

Explanation: This is an internal IMS error. The internal destination list is invalid.

System Action: The region that issued this abend is terminated.

Programmer Response: Check for user modifications to module DFSRRA00.

Problem Determination: 1, 2, 3, 4, 35. Also, get an assembly listing of DFSRRA00 as used on site.

0646

Explanation: The SPIE option in the PARM field is invalid.

System Action: The region that issued this abend is terminated.

Programmer Response: Correct the JCL, and resubmit the job.

Problem Determination: 1, 2, 3, 4

0648

Explanation: The validity check option in the PARM field is invalid.

System Action: The region that issued this abend is terminated.

Programmer Response: Correct the JCL, and resubmit the job.

Problem Determination: 1, 2, 3, 4

0650

Explanation: An invalid class number has been specified in the PARM field of the EXEC statement. The class number cannot exceed the number of classes defined during system definition.

System Action: The region that issued this abend is terminated.

Programmer Response: Correct the JCL, and resubmit the job.

Problem Determination: 1, 2, 3, 4

0652

Explanation: The PARM field was omitted. All IMS EXECUTE statements must contain a PARM field. See *IMS Version 9: Utilities Reference: Database and Transaction Manager* for PARM field formats.

System Action: The region that issued this abend is terminated.

Programmer Response: Correct the JCL, and resubmit the job.

Problem Determination: 1, 2, 3, 4

0654

Explanation: For control region types, the first two parameters of the EXEC statement are required. They must both be exactly 3 characters in length. If this is not true, then this abend occurs.

For other region types, the first parameter in the PARM field of the EXEC statement is required. It must be exactly 3 characters in length. If this is not true, then this abend occurs.

See *IMS Version 9: Installation Volume 2: System Definition and Tailoring* for a description of parameters used in the PARM field of the EXEC statement for all region types.

System Action: The region that issued this abend terminates.

Programmer Response: Correct the JCL, and resubmit the job.

Problem Determination: 1, 2, 3, 4

0657

Explanation: A GSAM initialization error occurred. During region initialization, the GSAM routines encountered an error condition such as:

- Invalid PCB processing options
- Invalid DBD or PCB
- A system error

System Action: IMS terminates abnormally.

Programmer Response: See *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis* for more information.

Problem Determination: 11, 35

0658

Explanation: The program name parameter was omitted from the PARM field.

System Action: The region that issued this abend is terminated.

Programmer Response: Correct the JCL, and resubmit the job.

Problem Determination: 1, 2, 3, 4

0662

Explanation: The first positional parameter in the PARM field is invalid.

System Action: The region that issued this abend is terminated.

Programmer Response: Correct the JCL, and resubmit the job.

Problem Determination: 1, 2, 3, 4

0684

Explanation: IMS type 2 SVC initialization failed. Some possible reasons for the failure are:

- An attempt was made to start a second copy of the IMS control region with the same IMSID as one already running. This can also occur if IMS SVC termination failed in a previous run of IMS with the same IMSID.
- SDFSRESL is not authorized or the IMS SVC module is being loaded from an unauthorized library.
- The region size is too small.

Message DFS686W, which is issued along with this abend, provides additional diagnostic information.

System Action: The region that issued the ABEND is terminated.

Programmer Response: Do one of the following:

- Correct the duplicated IMSID and rerun the job. If the IMS SVC termination failed in a previous run with the same IMSID, either re-IPL the operating system, or run with a different IMSID.
- Make sure SDFSRESL is authorized, or include the DFSRESLB DD statement that points to an authorized library containing the IMS SVC modules.
- Increase the region size.

For additional information, refer to message DFS686W.

Problem Determination: 1, 2, 11

0688

Explanation: The operator entered "CANCEL" or "C" in response to message DFS690A.

System Action: The region that issued this abend is terminated.

0689

Explanation: The DBRC region or DL/I subordinate address space region abends with this code when the control region is not active during its initialization. Message DFS689I is issued prior to the abnormal termination. It is likely that the control region is in the process of abending or the control region does not exist.

System Action: The region that issued this abend is terminated.

Programmer Response: Analyze the control region dump to determine the cause of the abnormal termination and resubmit the job.

Problem Determination: 1, 2, 4, 6, 35

0701

Explanation: IMS attempted to enqueue using either an invalid queue control block or queue element.

System Action: The IMS control region is abnormally terminated.

Master Terminal Operator Response: Perform an emergency restart.

Problem Determination: 1, 4, 5, 6, 35

0702

Explanation: IMS attempted to dequeue using either an invalid queue control block or queue element.

System Action: The IMS control region is abnormally terminated.

Master Terminal Operator Response: Perform an emergency restart.

Problem Determination: 1, 4, 5, 6, 35

0704

Explanation: An ICREATE call was issued to obtain a buffer. The buffer could not be allocated because a buffer already exists with the same name

System Action: The IMS control region is abnormally terminated.

Master Terminal Operator Response: Perform an emergency restart.

Problem Determination: 1, 4, 5, 6, 35

0705

Explanation: An IDESTROY call was issued to free a buffer, but a buffer with the name specified could not be found.

System Action: The IMS control region is abnormally terminated.

Master Terminal Operator Response: Perform an emergency restart.

Problem Determination: 1, 4, 5, 6, 35

0707

Explanation: IMS attempted to get a buffer (IGETBUF) from a nonexistent pool. Register 2 at abend contains the erroneous pool name.

System Action: The IMS control region is abnormally terminated.

Master Terminal Operator Response: Perform an emergency restart.

Problem Determination: 1, 4, 5, 6, 35

0708

Explanation: IMS attempted to free a buffer (IFREEBUF) to a nonexistent pool name. Register 2 at abend contains the erroneous pool name.

System Action: The IMS control region is abnormally terminated.

Master Terminal Operator Response: Perform an emergency restart.

Problem Determination: 1, 4, 5, 6, 35

0709

Explanation: IMS attempted to get a buffer (IGETBUF) with a length greater than the pool size. Register 2 at abend contains the pool name. Register 3 contains the requested size.

System Action: The IMS control region is abnormally terminated.

Master Terminal Operator Response: Perform an emergency restart.

Problem Determination: 1, 4, 5, 6, 35

0710

Explanation: The save area chain pointed to by register 13 was followed to locate the first save area. This save area did not contain a pointer to the save area prefix (SAP). Either the save area chain has been destroyed, or the SAP pointer in the first save area has been overlaid.

System Action: IMS terminates abnormally with a dump. If the abend occurs under the ESS TCB, the ESS TCB terminates with a dump and allows the control region to keep running.

Programmer Response: This is an internal IMS error.

Problem Determination: 4, 11, 35

0711

Explanation: An error occurred using RRS/MVS. For a detailed description of this abend, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: If this abend occurs during restart processing, IMS terminates abnormally. If it occurs during dependent region processing, the dependent region terminates abnormally.

System Programmer Response: If this is an internal error, such as an RRS/MVS service failure, first make sure that RRS/MVS was active on your system. Then contact the IBM Support Center for assistance.

0712

Explanation: The IMS transaction enqueue or dequeue service encountered a system error.

System Action: The IMS control region is abnormally terminated.

System Programmer Response: A return code in register 15 identifies the cause of the error. For the meaning of the code, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

Master Terminal Operator Response: Perform an emergency restart.

Problem Determination: 1, 4, 5, 6, 25, 35

0713

Explanation: The IMS MPP scheduler or the IMS transaction enqueue service encountered a system error.

System Action: The IMS control region terminates abnormally.

System Programmer Response: A return code in register 15 identifies the cause of the error. For the meaning of the code, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

z/OS System Operator Response: Perform an emergency restart; this should correct the situation.

Problem Determination: 1, 4, 6, 11, 15, 35

0714

Explanation: A system error occurred when the IMS BMP region scheduler or the IMS APSB/DPSB call processor attempted to enqueue or dequeue a region on a scheduler subqueue.

System Action: The IMS control region terminates abnormally.

System Programmer Response: Register 15 contains a reason code identifying the cause of the error. For the meaning of the code, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

z/OS System Operator Response: Perform an emergency restart; this should correct the situation.

Problem Determination: 1, 4, 6, 11, 15, 35

0716

Explanation: User ABENDU0716 is a general abend issued by module DFSIINQ0 when an error is encountered during initialization of the queue manager buffer pool.

Register 8 contains the following abend subcodes:

Subcode (Hex)	Meaning
04	IMODULE GETMAIN failed while allocating private storage for the queue buffer address list, DFSPQBFA. • Register 3 contains the requested storage length. • Register 15 contains the IMODULE return code. For an explanation of IMODULE return codes, refer to Appendix C, "IMS System Services Return Codes," on page 571.
08	The number of buffers required for the QBUF pool can be specified on the EXEC parameters or during system definition. If the number specified is greater than 3, the size of the QBUF pool is calculated by using the number of required buffers multiplied by the buffer size. If the number of buffers specified is 3 or less, the QBUF pool is allocated using an internal default size. If the default size is not large enough to hold at least one queue manager buffer, this abend is issued.
0C	After the QBUF pool was allocated, a test was made to ensure the pool was large enough to hold at least one queue manager buffer. During this validation, the QBUF pool size was found to be insufficient. Register 5 contains the computed length of a queue manager buffer.
10	During processing of the user-provided DD cards, the DCB ddname was found containing all blanks. Register 3 contains the address of the DCB being processed.
14	During processing of the user-provided DD cards, the primary DCB ddname contains eight characters. The primary ddname must be less than eight characters. Register 3 contains the address of the DCB being processed.
18	IMODULE GETMAIN failed while allocating private storage for the optional DCB DD cards. Register 15 contains the IMODULE return code. For explanations of IMODULE return codes, see Appendix C, "IMS System Services Return Codes," on page 571.
1C	DFSCBTS FUNC=ALTER failed while setting the block size and number for the QMBA block. Register 15 contains the DFSCBTS return code.

Programmer Response: Take the following actions:

Subcode (Hex)	Action
04	If the IMODULE failure was caused by a storage allocation failure, increase the region size parameter in the JCL and rerun the job.
08	This is an internal logic error. Refer to the problem determination.
0C	This is an internal logic error. Refer to the problem determination.
10	This is an internal logic error. Refer to the problem determination.
14	This is an internal logic error. Refer to the problem determination.
18	If the IMODULE failure was due to a storage allocation failure, increase the region size parameter in the JCL and rerun the job.
1C	This is an internal logic error. Refer to the problem determination.

System Action: IMS terminates abnormally.

Problem Determination: 1, 4, 11, 34

0717

Explanation: User abend 0717 is issued by modules DFSIINS0 and DFSDOBI0. When this abend is issued by module DFSIINS0, it is a general abend indicating that an error was found during processing. During IMS initialization, DFSIINS0 was called to perform storage pool initialization. Register 8 contains the abend subcodes in the "Subcode and Meaning" list below.

Module DFSDOBI0, the OSAM buffer pool initialization module, issues an IMODULE GETMAIN call to get storage for the buffer pools. If a nonzero return code is returned from DFSMODU0, abend 0717 is issued. The return code from the IMODULE GETMAIN request is in register 15.

Subcode (Hex) **Meaning**

04 A DFSBCB GET request was made to get QSAV storage in order to have enough save areas for modules called by DFSIINS0. A nonzero return code was received from DFSBCB. Register 15 contains the DFSBCB return code.

08 An IMODULE GETMAIN request was made to get storage for DFSZIB00, which is the primary allocation of ZIB and FAQE blocks. A nonzero return code was received from IMODULE.

- Register 2 contains the address of the IMODULE parameter list.
- Register 3 contains the requested storage length.
- Register 15 contains the IMODULE return code.

  For a description of these codes in register 15, see Appendix C, "IMS System Services Return Codes," on page 571.

0C An IMODULE GETMAIN request was made to get extended CSA storage for a storage pool header block, PHDRxxxx, where xxxx is the storage pool name. A nonzero return code was received from IMODULE.

- Register 2 contains the address of the IMODULE parameter list.
- Register 3 contains the requested storage length.
- Register 4 contains the address of the storage pool header CDE name.
- Register 15 contains the IMODULE return code.

  For a description of these codes in register 15, see Appendix C, "IMS System Services Return Codes," on page 571.

10 An IMODULE GETMAIN request was made to get storage for a storage pool, DFSPxxxx, where xxxx is the storage pool name. A nonzero return code was received from IMODULE.

- Register 2 contains the address of the IMODULE parameter list.
- Register 3 contains the requested storage length.
- Register 4 contains the address of the storage pool CDE name.
- Register 15 contains the IMODULE return code.

  For a description of these codes in register 15, see Appendix C, "IMS System Services Return Codes," on page 571.

14 All storage pools manipulated by the storage pool managers using the IGETBUF/IFREEBUF or DFSPOOL macros must have a unique four-character storage pool name. The pool name is used to find the storage pool header in the storage manager hash table. DFSIINS0 was attempting to add a new storage pool header address to the hash table, but the pool name was a duplicate.

- Register 4 contains the storage pool name.
- Register 9 contains the address of the storage pool header.

System Action: IMS terminates abnormally.

Programmer Response: To recover from a failure in the DFS modules, take the following actions:

DFSIINS0
See Appendix C, "IMS System Services Return Codes," on page 571 for explanations of IMODULE and DFSBCB return codes.

DFSMODU0
Specify a larger CSA, a larger region size, or both; then rerun the job.

DFSISMN0
Correct any error in the pool size specification on the PARM field on the JCL EXEC statement; then rerun the job.

DFSDOBI0
Either:

- Specify a larger CSA size, region size, or both.
- Decrease the number of subpools defined, decrease the size of the buffer pool, or both. Then rerun the job.

Problem Determination: 1, 4, 11, 34

0718

Explanation: An error occurred during IMS initialization. A required load module could not be loaded. For more information on this abend, see the *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis* manual.

System Action: IMS terminates abnormally.

Programmer Response: If this abend was issued by either DFSPLPP0 or DFSPLDR0, the modules for which the I/O error occurred are listed in message DFS677I, DFS678I, or DFS679I. Refer to the appropriate message for the information necessary to correct the problem.

0719

Explanation: The control region initialization was unable to successfully open any line groups. DFSIINB0 has detected an internal IMS error during IMS Transaction Manager initialization. Initialization cannot continue.

For a switched device, the terminal type identification exceeds the valid range.

System Action: IMS terminates abnormally.

Programmer Response: Ensure the correct control blocks were linked into the IMS nucleus.

Problem Determination: 1, 4, 6, 34

0720

Explanation: IMS initialization was unable to page fix storage. Register 14 contains the location that issued the abend. Register 15 contains the return code from the IMSAUTH SVC PGFIX function. For a description of the IMSAUTH PGFIX return codes, see “IMSAUTH Return Codes” on page 573.

IMS also issues this abend for other reasons. For a description of the subcodes associated with these reasons, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: IMS terminates abnormally.

Problem Determination: 1, 4, 6, 34

0721

Explanation: An IFREEBUF call was issued to free a buffer address that does not exist.

System Action: The IMS control region is abnormally terminated.

Master Terminal Operator Response: Perform an emergency restart.

Problem Determination: 1, 4, 5, 6, 34

0722

Explanation: An improper post of an ECB waited on by DFSISMN0 has been detected.

System Action: The IMS control region is abnormally terminated.

Master Terminal Operator Response: Perform an emergency restart.

Problem Determination: 1, 4, 5, 6, 34

0723

Explanation: IMS was unable to locate the subsystem control table (SSCT) during OSAM initialization.

System Action: IMS terminates abnormally.

System Programmer Response: Make sure that the resource cleanup module (DFSMRLCO) has been installed correctly as described in *IMS Version 9: Installation Volume 1: Installation Verification*. If you are running multiple levels of IMS on the same operating system, then make sure that DFSMRCLO is from the highest level IMS system that you are running.

Problem Determination: 1, 4, 6

0725

Explanation: IMS encountered insufficient storage while trying to obtain additional ZIBs and FAQEs, or an error was encountered in the execution of DFSMODU0. The return code is in register 15

System Action: The IMS control region terminates abnormally.

Programmer Response: Re-IPL z/OS, specifying a larger CSA allocation; rerun the job.

Problem Determination: 1, 4, 5, 6, 34

0728

Explanation: While attempting to make the IMS batch region nonswappable, the IMSAUTH SVC encountered a problem. The return code is set in register 15. For a description of the IMSAUTH NOSWAP return codes, see “IMSAUTH Return Codes” on page 573.

System Action: The IMS batch region terminates abnormally.

z/OS System Operator Response: Contact the IMS system programmer.

Problem Determination: 1, 4, 8, 34

0729

Explanation: ABENDU0729 is issued from both DFSSPM40 and DFSSPM50. During a DFSPOOL GET request, module DFSSPM40 is called to allocate a buffer from an existing storage pool. During a DFSPOOL REL request, module DFSSPM50 is called to release a buffer. If an unrecoverable internal error is detected by either module, a U0729 abend is issued. Register 15 contains the abend subcode.

Subcode (Hex)	Meaning
04	When obtaining a buffer, the caller's task was put in a wait state. When the task was posted, the storage manager determined that the post code was invalid.
08	The buffer allocated does not reside in the block, and a bit map error occurred. When processing a GET request, the storage manager finds a block with a free buffer and allocates that buffer by updating the bit map in the block header. Before returning the address of the buffer to the caller, the storage manager verifies that the buffer resides in the block. If the buffer does not reside in the block, the storage manager issues this abend. An overlay of storage could cause this error.
0C	The first word of the buffer prefix contains zeroes. Either an overlay occurred or a bad address was passed to the Storage Manager.
10	When releasing a buffer, either the buffer address passed by the caller or the block address obtained from the buffer prefix is invalid. Either an overlay has occurred or a bad address was passed to the storage manager.
14	A buffer is not being released to the correct pool. An overlay might have occurred.
18	The buffer being released is not currently allocated. An overlay might have occurred.
1C	The address of the buffer being released is not on a buffer boundary within the block.

System Action: IMS terminates abnormally.

Problem Determination: 1, 4, 6, 11, 34

0730

Explanation: During IMS initialization, module DFSXSPM0 was called to perform storage pool manager initialization. User ABENDU0730 is a general abend issued by module DFSXSPM0 when an error is found during processing. For explanations of IMODULE return codes, refer to Appendix C, "IMS System Services Return Codes," on page 571. Register 8 contains the following abend subcodes:

Subcode (Hex)	Meaning
04	An IMODULE GETMAIN request was made to get extended CSA storage for the storage pool manager hash table, SPMHSHTB. A nonzero return code was received from IMODULE. • Register 2 contains the address of the IMODULE parameter list. • Register 3 contains the requested storage length. • Register 15 contains the IMODULE return code.
08	An IMODULE GETMAIN request was made to get extended CSA storage for the storage pool manager bit map lookup table, SPMBMTAB. A nonzero return code was received from IMODULE. • Register 2 contains the address of the IMODULE parameter list. • Register 3 contains the requested storage length. • Register 15 contains the IMODULE return code.
0C	An IMODULE LOAD request was made to load the storage pool definitions, DFSSPM10, into extended CSA. A nonzero return code was received from IMODULE. • Register 2 contains the address of the IMODULE parameter list. • Register 15 contains the IMODULE return code.
10	An IMODULE LOAD request was made to load the composite module DFSSPM00, which contains the storage pool manager routines. A nonzero return code was received from IMODULE. • Register 2 contains the address of the IMODULE parameter list. • Register 15 contains the IMODULE return code.
14	An IMS.PROCLIB member was

	specified using the SPM=suffix on the control region JCL, but the member was not found.
18	An internal error occurred while processing IMS.PROCLIB FPL= statements. DFSXSPM0 found more valid pool names than it's defined temporary pool areas. Only fixed type pools contain buffer definitions which are overridden by the PROCLIB statements. All fixed pool definitions reside in DFSSPM10. The amount of storage reserved for temporary definitions in DFSXSPM0 must be enough to allow all fixed pools to be processed.

System Action: IMS terminates abnormally.

Problem Determination: 1, 4, 11, 34

0731

Explanation: The storage pool manager was called for a DFSPOOL ALLOC function to allocate one or more of the storage pools defined in module DFSSPM10. During the storage pool allocation process, one or more errors were found. The storage manager returned with a nonzero return code causing the caller to terminate processing. For explanations of DFSPOOL and IMODULE GETMAIN return codes, refer to Appendix C, "IMS System Services Return Codes," on page 571.

System Action: IMS terminates abnormally.

Programmer Response: Register 2 contains the DFSPOOL parameter list address, which points to one or more pool allocation entries. Each entry is mapped by the POOLALOC DSECT generated by DFSPOOL GENLISTD. The last entry in the list is the word, X'FFFFFFFF'.

Each entry at byte 2 contains a 2-byte return code which indicates whether or not the specified pool in the entry was allocated. The high byte of the return code, if it is nonzero, is the return code from the IMODULE GETMAIN service. The low byte of the return code is from the DFSPOOL ALLOC service.

Register 15 contains the largest DFSPOOL return code found during processing for all entries.

0732

Explanation: The storage pool manager was called for a DFSPOOL GET function to obtain a buffer from a previously allocated storage pool. An error was found during the buffer allocation process. A nonzero return code from the storage manager caused the caller to terminate processing. Register 15 contains the DFSPOOL GET return code. For explanations of the DFSPOOL return codes, refer to Appendix C, "IMS System Services Return Codes," on page 571.

System Action: IMS terminates abnormally.

Programmer Response: If the return code indicates that there was a problem with the upper limit, make sure the upper limit that the user specified was not in error. If the return code is greater than X'28', the problem is an internal IMS error.

Problem Determination: 1, 4, 11, 34

0735

Explanation: This abend is a general abend issued by modules DFSICIO0 or DFSASLT0 when an unrecoverable internal error is detected during processing (that is, when the CLB ITASK is running but the running flag is not on).

System Action: IMS terminates abnormally.

Problem Determination: 1, 4, 5, 6, 11, 36

0736

Explanation: There is insufficient storage to obtain the restart work area during IMS initialization.

System Action: The IMS control region is terminated.

Programmer Response: Increase the region size for the IMS control region, and restart IMS.

Problem Determination: 8

0737

Explanation: An internal IMS error occurred while attempting to start a database.

System Action: IMS terminates abnormally.

Programmer Response: One of the following codes in register 15, at the time of the abend, identifies the cause of the failure:

Code (Dec)	Meaning
1	A GETMAIN for working storage failed. The size requested is in register 8 at abend time.
2	The control region has knowledge of a backout required for the database being started, but DBRC does not know the necessary backout.
3	An attempt to obtain an internal RRE block failed.
4	The database being started required a backout. However, this database was one of several databases originally changed under a particular recovery scope. After performing the backout, the blocks for the other databases could not be located for updating system information.

Take appropriate action according to the indicated return code.

0738

Explanation: When the IMS control region completed a service for a message region, the return to the message region failed because the region was canceled by z/OS.

System Action: The PST is freed for reuse. (The message region has already terminated as a result of MVS CANCEL.)

Problem Determination: 1

0739

Explanation: There is insufficient storage in an IMS message region to obtain the dependent region inter-region communication area.

System Action: The message region is terminated.

Programmer Response: Increase the size of the message region, and resubmit the job.

Problem Determination: 8

0740

Explanation: The partner product user exit returned a non zero return code to module DFSRDY00. The return code is in R15.

System Action: IMS terminates abnormally.

Programmer Response: Correct the problem encountered by the partner product user exit, DFSPPUE0.

0741

Explanation: Multiple Systems Coupling was unable to complete initialization.

System Action: IMS terminates abnormally.

Programmer Response: Register 14 minus 4 is the address of the instruction that determined the error. Ensure that the modules to be loaded are in SDFSRESL. Ensure that z/OS includes sufficient CSA at IPL time.

Problem Determination: 1, 4, 35

0742

Explanation: An error was detected in the maintenance of the DL/I task identification, which governs the reuse of freed space in a database during IMS online execution. One of four conditions was encountered:

1. During checkpoint, a new date was detected, but a valid DL/I task identification could not be generated. The cause could be an error in the time SVC, or the date set in the processor. The condition can also occur in an IMS system that has run continuously in excess of 658 days; the portion of the task identification containing the date information has overflowed.
2. An error in the range of active identifications was detected. For example, the low identification was higher than the next-available identification.
3. The identification of a dependent region, not within the range of known active identifications, was detected.
4. While doing backouts required during XRF takeover or during the recovery phase of Fast Database Recovery, the identification of a dependent region, not within the range of known active identifications, was detected.

System Action: For conditions 1, 2, and 4, the IMS control region terminates abnormally. For condition 3, the application in the dependent region terminates abnormally.

System Operator Response: For conditions 1, 2, and 4, perform an emergency restart. For condition 3, issue a `/START` command to start the program and transaction affected, and, if the region was a BMP, restart the region.

Programmer Response: Refer to *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis* for more information.

0743

Explanation: The active region counter in the SCD is negative.

Abend U0743 is a standard abend issued by DFSSABN0. This module is invoked when an application program or a dependent region abends, to perform necessary PST cleanup functions.

System Action: IMS terminates abnormally.

0744

Explanation: This is an internal system error. Module DFSSMIC0 was called invalidly. The call function in the RCSCHD field of the relocated RCPARMS image in the PST must be INIT or LOAD.

System Action: The IMS control region terminates abnormally.

Master Terminal Operator Response: Perform an emergency restart.

Problem Determination: 1, 4, 5, 6, 25, 35

0745

Explanation: The IMS scheduler discovered an invalid function (**not** CREATE THREAD) in the SSOB during scheduling of a batch message processing (BMP) region.

System Action: The program terminates abnormally.

Problem Determination: 1, 5, 11, 12

0746

Explanation: Module DFSDLA00 detected a failure on a CLOSE call during batch termination or checkpoint.

System Action: The application terminates abnormally.

Programmer Response: Check the system error messages, the IMS error messages issued, or both for the CLOSE failure.

0747

Explanation: A second CREATE-THREAD was issued for the same TCB without issuing a TERM-THREAD.

System Action: The dependent region is terminated.

Problem Determination: 4, 35

0748

Explanation: The IMODULE macro encountered an error while trying to perform an IMODULE LOAD request for module DFSCST00.

System Action: IMS terminates abnormally.

Programmer Response: The IMODULE LOAD macro returned a nonzero return code in register 15. For an explanation of the return code, see the IMODULE LOAD return codes in “IMODULE Return Codes” on page 571.

Problem Determination: 1, 4, 12, 35

0749

Explanation: When a user abend code 0 has been issued by an application program, this abend will appear. Additional information can be obtained from your system console log. If terminate thread processing is done by the end-of-task or end-of-storage instead of the IMS STAE processing, ABENDU0749 can occur.

System Action: IMS uses abend U0749 as the completion code for IMS messages and log records.

Programmer Response: If abend U0749 completion is desired, use abend code 0. If abend U0749 is not desired, do not use abend code 0.

Problem Determination: 1, 5, 6, 11

0756

Explanation: In an XRF environment, an OPEN failure was detected for a local message queue data set, or DFSQDOC0 failed to load.

IMS also issues this abend if the size of the local message queue is too small. This occurs when the number of records in any of the local message queue data sets is less than the number of records specified in the SHUTDWN parameter in the MSGQUEUE macro defined during system definition.

System Action: IMS terminates abnormally.

Programmer Response: This is probably a user error. Check LRECL and BLOCKSIZE definitions for the local message queue data sets: IMS.LGMSGL, IMS.SHMSGL, and IMS.QBLKSL.

Problem Determination: 4, 35

0757

Explanation: An error condition was detected in the IMS system message Queue Manager component. It was probably caused by a logic error in one of the Queue Manager’s callers, by a logic error within one of the Queue Manager routines, or by an operations error relating to an emergency restart situation. The following operational errors can lead to this abend:

- Warm starting after changing the defined system
- Attempting an emergency restart with the wrong, or a missing, log data set
- Using an improperly terminated log data set for an emergency restart

System Action: The system terminates abnormally.

Programmer Response: First eliminate the possibility that an operational error could have caused the abend. If this is not the cause of the problem, then use the subcode value in register 15 at the time of the abend and refer to the U757 FAILURE ANALYSIS STRUCTURE TABLE for a complete description of the problem.

Problem Determination: 1, 2, 3, 4, 6, 8, 11, 35. Save the log data sets from the last DUMPQ/BUILDQ or from the last cold start.

0758

Explanation: A message queue data set has overflowed before the system could be shut down with an internal checkpoint dump queue.

System Action: IMS terminates abnormally.

Programmer Response: The space allocation for one of the queue data sets listed below must be increased and the system emergency restarted with a build queue. The number of shutdown records can be increased by performing an IMS system definition. The contents of

register 14 at abend point to the DCB of the full queue data set.

- IMS.QBLKS
- IMS.SHMSG
- IMS.LGMSG

Often this error is related to a loop in an application program that creates a large amount of message data. If this is the case, the output from the looping application can be identified by examining the log data set. For additional information, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

Problem Determination: None.

0759

Explanation: Unrecoverable error in queue manager attempting to read or write message queue data sets.

System Action: IMS terminates abnormally.

Master Terminal Operator Response: Attempt to restart IMS with the BUILDQ and FORMAT options.

Programmer Response: Refer to ABEND0759 in *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis* for more information.

Problem Determination: See ABEND0759 in *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis* for more information.

0760

Explanation: One of two error conditions was detected:

- A message queue data set requires formatting.
- The number of records reserved for a message queue data set for IMS shutdown is greater than the number of records in the data set.

System Action: IMS terminates abnormally.

Programmer Response:

1. Format one of the data sets listed below by restarting IMS using the FORMAT keyword parameter. Message `DFS986A`, issued just prior to abend `U0760`, contains the name of the data set requiring formatting. Register 7, at the end of the abend, contains the DCB address.
2. Increase the space allocation for one of the system data sets listed below. Emergency restart the system with a build queue (/ERESTART BUILDQ FORMAT), remembering to FORMAT those data sets that were reallocated. You can alter the number of shutdown records by performing an IMS system definition. Message `DFS986A`, issued just prior to abend `U0760`, contains the name of the data set causing the error. Register 7, at the time of abend, contains the address of the DCB in error. The system data sets are as follows:
   - IMS.QBLKS
   - IMS.SHMSG
   - IMS.LGMSG
   - IMS.SPA

This error is caused by starting IMS with an unformatted system data set (above) or by reallocating one of these system data sets with a quantity that is too small.

0762

Explanation: A critical system error was detected during IMS cross-memory processing.

System Action: IMS terminates abnormally.

Master Terminal Operator Response Emergency restart IMS.

Problem Determination: 1, 3, 4, 6, 33, 34

0763

Explanation: The IMS system message queue manager was waiting to be posted by a queue manager for another IMS subtask, but the DECB was posted by another part of the IMS system. This is an IMS system error.

System Action: IMS terminates abnormally.

Problem Determination: 1, 2, 4, 6, 9, 35

0764

Explanation: OSAM posted I/O ECB with an abnormal I/O ending code which does not equal (X'7F'). There are two cases causing the abend 764. They are described as follows:

1. If R15 = 0, it indicates that OSAM is unable to convert an RNB to a full disk address in the form MBBCCHHR during a WRTQUED redrive processing.
2. IF R15 = X'FFFFFFFF', it indicates that the user specified 'DUMPIO=YES' in DFSVSMxx to ask abend 764 for any abnormal I/O ending.

System Action: IMS terminates abnormally.

Programmer Response: This is an internal IMS error.

System Operator Response: Contact the IMS system programmer.

Problem Determination: 1, 2, 4, 35

0765

Explanation: The OSAM access method attempted to translate a virtual address to a real address. The translation failed. As all pages were page fixed prior to attempting translation, this is an internal IMS error. In an z/OS environment, the failure could have been caused by a bad return code from the page fix routine. The DECBSTAT field in the DECB contains an error status code. For the meaning of the code, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: IMS terminates abnormally.

Problem Determination: 1, 2, 4, 35

0766

Explanation: A critical system problem was detected during IMS ITASK dispatching.

System Action: IMS terminates abnormally.

Master Terminal Operator Response: Emergency restart IMS.

Problem Determination: 1, 4, 5, 6, 35

0767

Explanation: A critical systems problem was detected while the IMS dispatcher was processing an IWAIT or ISERWAIT call.

System Action: IMS terminates abnormally.

Master Terminal Operator Response: Emergency restart IMS.

Problem Determination: 1, 4, 5, 6, 35

0768

Explanation: A system problem was detected while the IMS dispatcher was processing an ISWITCH call.

System Action: IMS terminates abnormally.

Master Terminal Operator Response: Emergency restart IMS.

Problem Determination: 1, 4, 5, 6, 35

0769

Explanation: A critical system problem was detected in a dispatching subroutine.

System Action: IMS terminates abnormally.

Master Terminal Operator Response: Do an emergency restart.

Problem Determination: 1, 4, 5, 6, 35

0770

Explanation: A systems error was detected while a dependent region was attempting to initialize an ITASK.

System Action: The dependent region terminates abnormally.

Master Terminal Operator Response: Shut down the control region with a dump. Restart the control region, and then restart the dependent region.

Problem Determination: 1, 5, 6 (save the control and dependent region dumps), and 35

0773

Explanation: The application received a read or open error from the buffer handler during an ISRT or DLET call that required single call backout to remove updates made during the call. Single call backout failed for one of these reasons:

- No disk log was specified in batch for dynamic backout.
- Positions in other PCBs in the PSB were adjusted.

System Action: The application program terminates abnormally.

Programmer Response: Correct the cause of the read error or single call backout failure.

Problem Determination: 1, 17

0774

Explanation: A PST that was waiting for a lock for a resource from module DFSPIEX0 or DFSPIXA0, was posted out of a wait state with a post code that was not X'60' or X'6F'. A X'60' post code is used when the PST is posted as the result of a deadlock. A X'6F' post code initiates the PST when it has been granted the lock for which it has been waiting.

Register 10 in the abend dump contains the address of the PST. The first word of the PST is the DECB that contains the invalid post code.

System Action: IMS terminates abnormally.

Programmer Response: If the dump is from an IMS control region, scan the Dispatcher trace to find the X'06' entry that indicates the post. This entry contains the address where the post was initiated.

If the dump is from a CICS region, scan the CICS trace for an entry for the post.

0775

Explanation: This abend is issued when IMS cannot acquire any more ENQ/DEQ blocks or the amount of storage that was specified by the PIMAX parameter has been exhausted. It can be either a standard abend or a pseudoabend.

Case1 A standard abend is issued.

Case2 A pseudoabend is issued.

See message DFS2450I in this manual for additional information. If message DFS2405I was not issued, the amount of storage specified in the PIMAX parameter may have been exhausted. Increase the size of the PIMAX parameter in member DFSPBIMS in a DB/DC environment, or in member DFSPBDBC in a DBCTL environment. For batch data sharing, refer to *CICS/ESA® Messages and Codes*.

System Action: For Case1, the IMS control region terminates abnormally. For Case2, the application program terminates abnormally.

Programmer Response: For Case1, contact the IBM Support Center for assistance. For Case2, correct the cause by increasing the maximum storage available for the ENQ or by decreasing the requirements for ENQs.

Master Terminal Operator Response: For Case1, none. For Case2, decrease the system load by stopping the regions; then start the indicated SMBs and PSBs. If a BMP is not taking checkpoints and has used all available ENQ space, cancel the BMP.

Problem Determination: For Case1, 1, 2, 4, 6, 13.

0776

Explanation: A failure occurred in dynamic backout while processing a ROLB call. This can happen if the current online OLDS does not contain the checkpoint required by a ROLB call. The OLDS might have wrapped if its allocation is too small compared to the huge volume of processing.

System Action: The IMS dependent region that encounters the ROLB call failure terminates abnormally.

Programmer Response: Refer to message DFS981I, which accompanies this abend, to determine the reason for the failure. Run Batch Backout on the databases named in the message.

Problem Determination: Refer to message DFS981I to determine the reason for the failure.

0777

Explanation: The application program terminated abnormally because a potential resource was in the deadlock condition.

System Action: The application program terminates abnormally. If it was running in an MPP or IFP region it will automatically be rescheduled.

System Programmer Response: If a BMP failed, rerun the job.

System Operator Response: None.

Problem Determination: None.

0778

Explanation: A ROLL call was issued by a user application program, or a failure during the Database Backout utility in another region resulted in all regions being terminated as a result of an internally issued ROLL call.

System Action: The application program terminates abnormally without a storage dump.

Master Terminal Operator Response: A message processing program (MPP) is automatically rescheduled.

Problem Determination: None.

0779

Explanation: The application program attempted to issue more *Q command codes between sync points than specified in the MAXQ parameter of the PSBGEN statement in the PSB.

System Action: The control region continues normally; however, the message region terminates abnormally.

Programmer Response: If the application program was in error (for example, looping), correct it. If the PSB contains too low a value for MAXQ, correct the PSB and regenerate the ACB.

Problem Determination: 4, 19. The number of Q commands issued since the last sync point is accumulated in the PSB.

0780

Explanation: The IMS latching routine detected a critical system error.

Programmer Response: Determine the cause of the problem by referring to *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: IMS terminates abnormally.

Problem Determination: 4, 5, 6, 35

0783

Explanation: DFSDPDM0 attempted to delete and release the space for a PSB that is not on its master PDIR's chain.

System Action: The system abnormally terminates.

Programmer Response: None.

Problem Determination: 4 and 5, or 25

0790

Explanation: The IMS USE Manager routine detected a critical system error.

System Action: IMS terminates abnormally.

Programmer Response: Determine the cause of the USE manager by referring to the dump analysis in *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

0791

Explanation: The ODBA Syncpoint TCB initialization or processing detected a critical system error. For additional information, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: IMS terminates abnormally.

System Operator Response: Emergency restart IMS to resume processing.

Problem Determination: 1,3,4,5,11

0793

Explanation: Module DFSISTS0 was unable to open either the LOGIN or LOGOUT DD statements.

System Action: Module DFSISTS0 terminates abnormally.

Programmer Response: None.

Problem Determination: 1, 2, 3, 8. Check the JCL for each ddname. Correct the JCL, and resubmit the job.

0794

Explanation: Module DFSISTS0 attempted to link to the SORT program and encountered a nonzero return code. A zero return code is required.

System Action: Module DFSISTS0 terminates abnormally.

Problem Determination: 1, 2, 3, 4, 8, 25, 35

0795

Explanation: An invalid record type was encountered in the output phase of the SORT program. Register 7 points to the invalid record. This is probably a SORT program problem.

System Action: Module DFSISTS0 terminates abnormally.

Problem Determination: 1, 2, 3, 4, 8, 25, 35

0796

Explanation: While processing a REPL call, the replace module found that the root segment was not locked by Retrieve.

System Action: The application program terminates abnormally.

Problem Determination: 17a through 17d, 17f, 17g, 35

0797

Explanation: Delete/Replace received an unexpected segment from the buffer handler.

System Action: The application program terminates abnormally.

Problem Determination: 17a through 17d, l7f, l7g, 35

0799

Explanation: Delete/replace called the user-written segment edit/compression routine to expand or compress a segment. Upon return, delete/replace found the new "LL" for the segment exceeded the maximum allowable "LL".

In Fast Path, upon return from the exit routine, the key is altered (subcode 1), or the length is incorrect (subcode 2).

System Action: The application program terminates abnormally.

Programmer Response: Correct the segment edit/compression routine, and rerun the job.

Problem Determination: 17a through 17g, 35

0800

Explanation: A user-written segment edit/compression routine has expanded a variable-length compressed segment to a size greater than maximum segment length.

During processing of the VLEXP routine in module DFSDLR00, a PCB with PROCOPT=GO, GON, or GOT (GOx) detected an invalid length in the LL field of a compressed segment. The length value in the LL field exceeded the maximum segment length by more than 10 bytes or was equal-to-or-less than 2 bytes. An update transaction might have changed the segment data before it expanded for the PROCOPT=GOx PCB.

System Action: The batch or message processing region is abnormally terminated. The control region continues normally.

Programmer Response: Correct the segment edit/compression routine. Refer to the DL/I User Exit Routine section of *IMS Version 9: Customization Guide*

for more information on the segment edit/compression routine.

If a PCB detected an invalid length in the LL field, rerun the PROCOPT=GOx transaction. If the abend is reissued, check the LL field of the segment in the database.

Problem Determination: 4, 17c

0801

Explanation: There are three reasons for this abend.

1. The "PSBIOAWK" work area is too small to hold the concatenated keys or segments to be returned. This might be a user error if the user defined an area too small in the PSBGEN (PSBGEN statement, IOASIZE= parameter) or if a path call was specified in such a way that the combined length of the concatenated segments to be returned to the application would be greater than 65535 bytes. This could be an IMS error if the IOASIZE parameter is omitted in the PSBGEN, in which case the size of the "PSBIOAWK" would be determined by the block builder.
2. A nonzero return code from storage manager in response to a GET BUFF call from DFSDLR00 to the "DBWP" pool. A nonzero return code from storage manager usually indicates that there is not enough room in the "DBWP" pool to satisfy the request.
3. The length field in a variable length segment is either less than two or greater than the defined maximum length.

System Action: The application program is terminated abnormally.

Programmer Response: Ensure that the value defined for the "IOASIZE=" parameter complies with the specifications for that parameter in *IMS Version 9: Utilities Reference: System*. If the call at the time of the ABEND was a path call, ensure that the combined length of all concatenated segments to be returned does not exceed 65535 bytes. If this size has been exceeded, the user might want to issue a series of path calls, rather than a single call, so that the 65535 byte limitation is not exceeded during any one call. If the abend is the result of an incorrect length field in a variable length segment, correct the invalid length.

Problem Determination: 17a, 17b

0802

Explanation: Replace tried to obtain space from space management to replace a variable-length segment which caused the data to be separated from the prefix and no space was available.

System Action: The application program terminates abnormally.

Programmer Response: Reorganize the database.

Problem Determination: 17a through 17g, 35

0803

Explanation: Delete/replace was unable to find a logically related segment (usually a logical parent or a physically paired logical child); or a logical parent's counter is negative if decremented for deletion of a logical child; or a logical child could not be found on a logical twin chain.

If you were unable to find a physically paired logical child, one of two conditions exists:

- The paired segment does not exist.
- The paired segment intersection data is not equal to the original intersection data.

If it is this last condition, it is caused by the user's load program failing to load both copies with equal intersection data.

System Action: The application program terminates abnormally.

Programmer Response: Ensure that the reorganization/load program was performed correctly. See the "Partial Database Reorganization Utility" section of *IMS Version 9: Utilities Reference: Database and Transaction Manager*.

Problem Determination: 17a through 17g, 35.

At the time of the abend, if register 11 points to CSECT DFSDLDS0, delete or replace was unable to find the logical parent or the paired logical child. However, if register 11 points to CSECT DFSDLD00, register 15 will contain a value to identify the problem. If register 15 is negative, the logical parent counter was zero prior to the delete call. If register 15 is equal to zero, the logical parent does not point to the logical child to be deleted.

0804

Explanation: A DL/I action module made a request for working storage. Because of insufficient space available in the database working pool, the request could not be satisfied. The database working pool should be at least as large as the number of active dependent regions times 2K.

System Action: The application program is stopped and the current message is re-enqueued on the message queue.

Programmer Response: If the 0804 abend occurs in an online system, the database working pool (DBWP) should be increased in size. This size can be specified as a parameter on the EXEC statement. If the abend occurs in a batch region, the region size should be increased.

System Operator Response: The application program

can be restarted and the transaction will be scheduled again.

Problem Determination: 4, 5, 6

0805

Explanation: During Reload processing for a partition of a High Availability Large Database (HALDB) it was determined that either the prefix was not valid for a HALDB partition or the prefix length was not valid for a HALDB partition. Locate the correct offset of field PSTFUNCH by assembling the IPST DSECT as referenced by the DFSADSCT module. PSTFUNCH will contain one of the following error codes:

RER1 Invalid partition prefix

RER2 Invalid partition prefix length

System Action: The application program terminates abnormally.

User Response: Specify the correct partition database that was unloaded and rerun the reload job.

Problem Determination: 1, 2, 3, 17a, 35, 36

0806

Explanation: Delete/replace got an invalid return from the buffer handler on a byte locate call, or an error occurred attempting to mark buffer altered. This is an IMS system error.

System Action: The application program terminates abnormally.

Problem Determination: 17a through 17g and 35.

0807

Explanation: Delete/replace cannot obtain a position in the physical structure (physical path to root required). This is probably a system error.

System Action: The application program terminates abnormally.

Programmer Response: None.

Problem Determination: 17a through 17g, and 35. If register 11 points to CSECT DFSDLDS0, delete/replace was unable to follow the logical blocks (SDB and level tables) from the segment to be deleted or replaced up to the root segment. This is usually caused by retrieve not posting position where delete expected it. If register 11 points to CSECT DFSDLD00, the segment to be removed is not pointed to by the physical chain (PCF, PCL, PTF, PTB, or RAP).

0808

Explanation: Delete/replace cannot resolve database blocks description of logical relationships or could not calculate the address of the PSDB for the segment code just retrieved.

System Action: The application program terminates abnormally.

Problem Determination: 17a through 17g and 35

0810

Explanation: User program attempted to load a database and was not sensitive to all data set groups within the database.

System Action: The application program terminates abnormally.

Programmer Response: Perform PSB generation again, and make certain that the program is sensitive to at least one segment in each data set group.

Problem Determination: 2, 3, 9, 18, 19

0811

Explanation: Delete/Replace was attempting to change a pointer in a segment's prefix. It found that the old value of the pointer was not as expected. Prior pointer maintenance was erroneous.

System Action: The application program terminates abnormally.

Problem Determination: 17a through 17g and 35

0814

Explanation: An unrecoverable error was detected during data capture processing when changed data logging or changed data exits were defined for the database. The type of error depends upon which module generated the abend:

DFSCPY40
The abend was issued because an error was detected while preparing to call MVS/ESA™ data compression services, or the return code from MVS/ESA data compression services indicated an error condition.

DFSECP10/DPSECP20
The pseudoabend occurred because DFSDCAP0 detected an error during data capture for a full-function database.

DFSPCC30
A DSPSERV or ALESERV request received an invalid return code in register 15 at the time of the abend. For return code 8, the data space

creation was not allowed because the IEFUSI exit routine prevents creating key 8 data spaces.

DFSDCAP0
An error occurred during data capture for a full-function database in a batch region (DLI/DBB).

System Action: The application program terminates abnormally.

Problem Determination: Check the JCL for the batch region. For detailed information, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

0816

Explanation: Index synchronization error. The contents of a secondary index do not correspond to the contents of the target database. This could be the result of the target and secondary DBDs being rebuilt without rebuilding the PSBs referencing them.

System Action: The program terminates abnormally.

Programmer Response: Ensure that the index is recovered to the same level as the target database; inspect the index segment to ascertain whether its contents are valid. It can be found at the address contained in PSBXIOWK. The PSB is found by following the pointers at PSTPSB to the PDIR and PDIRADDR to the PSB. Reload the database and all secondary indexes. An effort should be made to trace the source of the synchronization error to a specific database call.

Problem Determination: 4, 5, 11, 17b, 17c, 17g, 35

0819

Explanation: This is an internal IMS system error. One of the following occurs:

- A CLOSE failure occurs during phase 1 of sync point, and sync point processing is aborted.
- Any participant votes NO in phase 1 of sync point.
- A module called the synchronization point processor (DFSFXC30) and requested an undefined function.
- In a Database Control (DBCTL) environment, a Coordinator Control (CCTL) subsystem thread requested a sync point COMMIT before doing a sync point PREPARE.

For the encoded function codes located in the PST, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: IMS abnormally terminates.

z/OS System Operator Response: Inform the master terminal operator of the IMS control region abend.

Master Terminal Operator Response: Execute an emergency restart.

Problem Determination: 4, 5, 11, 35

0820

Explanation: An error has been detected in either module DFSDLA30 or DFSFXC40. The following are possible errors:

- DFSDLA30:
  - An invalid return code was received from the queue manager. This is an IMS system error.
  - A failure occurred while trying to locate the call destination.
- DFSFXC40
  - An invalid function code was passed into DFSFXC40. This is an IMS system error.
  - A nonzero return code was received from the message router DFSICLRO. This is an IMS system error.
  - The I/O PCB destination output represents an SMB and the dependent region is message driven. This is an IMS system error.

System Action: IMS terminates abnormally.

Problem Determination: 4, 5, 11, 34

0821

Explanation: An error has occurred during initialization of the program and database control blocks while executing a DBB type IMS region.

System Action: The IMS region terminates abnormally. One or more messages will have been written to the system console. If the batch initialization module (DFSBIND0) detects the error then one or more of the following messages will appear: DFS2855I, DFS823I, DFS824I, DFS826I, DFS830I, DFS838I, DFS3467I.

If the error is detected by the block mover module DFSDBLM0, or by any module called by block mover, any of the messages put out by those modules in a batch DBB region might appear. These include DFS561I, DFS564I, and DFS592I.

Programmer Response: See the message listed above to determine the cause of failure and problem determination steps.

0822

Explanation: A single message queue segment will not fit into the PSB index work area. This is an IMS system error.

System Action: IMS terminates abnormally.

Problem Determination: 4 or 11 and 35

0824

Explanation: IMS received an invalid return code from the user's program routing exit. Register 15 contains the invalid return code. For valid return code values, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

0825

Explanation: An unexpected return code from the buffer handler occurred.

System Action: The batch or message processing region terminates abnormally. The control region continues.

Programmer Response: Review the PST fields. Pertinent PST fields and contents are:

Name	Description
PSTFNCTN	Requested function
PSTRTCDE	Return code

If the return code is X'04', the following fields contain relevant information:

Name	Description
PSTBYTNM	Incorrect relative byte address
PSTDBPCB	Address of the PCB
DBPCBJCB	Address of the JCB

If an I/O error is indicated, take the action required to recover the database. Any other error is probably a DL/I error.

Problem Determination: 4, 5, 11, 17b, 17c, 17g, 35. Re-create the problem in a batch environment and snap control blocks and buffer pool on two calls prior to this abend.

0826

Explanation: A situation was encountered by index maintenance that prohibits further processing of the database. Message DFS0840I identifies the index and gives a status code. Probable causes are:

- Read error indicated by buffer handler. The status code is 'NO'.
- Unable to open the index database. The status code is 'NI'.
- I/O error indicated when inserting to an index DB. The status code is 'NO'.
- Open error on work file data set during DB load with secondary indexes. The status code is 'NI'.
- Index Maintenance is unable to handle the return code it received from the buffer handler. The status code is blanks.

System Action: The application program terminates abnormally.

Programmer Response: If an open error is indicated, check JCL parameters or missing DD statements. For an I/O error, investigate the need to recover the affected data set.

Problem Determination: 35

0827

Explanation: An error occurred during LATCH, UNLATCH, or IMODULE LOAD processing related to use of the Index exit routine. The probable causes are:

- Exit routine not found in Job or Step libraries under the name indicated in the DBDGEN.
- Read error encountered on reading exit routine from library.
- Latch ECB posted incorrectly while serializing the Index exit routine.

System Action: IMS terminates abnormally.

Programmer Response: Analyze the possible library errors that might have caused the problem. Latch problems can only exist in the online environment. If not a hardware or a user error, proceed with the problem determination.

Problem Determination: 3, 8, 11, 17b, 18, 35

Module: DFSURGU0

0828

Explanation: Index Maintenance attempted to insert a new index entry, with index specified as unique, and encountered a duplicate index entry.

System Action: At the time the error was encountered, the segment being inserted was already added to the database and the other indexes might already have been updated. If you are executing in a batch system with disk logging and if the execution parameter BKO=Y (dynamic backout) was not specified, it is necessary to run the Database Backout utility. Otherwise the system runs dynamic backout.

Programmer Response: If duplicate secondary index entries occur, the index should be specified as non-unique, and an overflow entry-sequenced data set should be provided.

Problem Determination: 1, 11, 35

0829

Explanation: When a VSAM ERASE call was issued, an invalid return code was returned from the VSAM buffer handler.

System Action: IMS terminates abnormally.

Programmer Response: None.

Problem Determination: 11, 17, 35

0830

Explanation: This is a pseudoabend issued when an application program issues a message GU call and the DC call handler (DFSDLA30) detects the message has invalid fields such as MSC SYSIDS, IMSID, or SOURCE name.

This error can occur when the resources where these fields were set from are changed while the message was on the queue in a shared queues IMSplex; or while the message was inflight in a remote IMS in a MSC network. It may also be due to an IMS internal error.

System Action:

- A pseudoabend U0830 is issued and message DFS554A is sent to the master terminal.
- The transaction and program are stopped.
- The message is placed back on the ready queue (unlocked).
- A 6701-LA3E record is written to the IMS log.

System Operator Response: If this is a shared queues IMS, first verify the message was not processed successfully by another IMS in the shared queue group. If the message is still on the queue, it may be removed by issuing a `/DEQUEUE TRANSACTION` *`tranname`* `PURGE1`. *Tranname* is the TRANCODE name in message DFS554A. You can also issue a `/START` command to restart the transaction and program again, if the error is corrected, to let the application program schedule again and GU the message.

If this is a shared queues IMSplex that is multiple systems coupling (MSC) capable, and the message was entered on an IMS that was taken down, and the error is due to an invalid MSC SYSID, the error may be corrected by starting all the IMSs in the shared queues group. This will cause the SYSIDs to be exchanged between the IMSs in the SQG and make all the SYSIDs valid.

Programmer Response: This could be a procedural or IMS internal error. To determine which and a possible resolution, the type 6701-LA3E records (and X'67D0' records if produced) will need to be printed with the File Select and Formatting Print utility (DFSERA10), and analyzed. See the *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis* diagram for specific information on this ABEND and the for information on the File Select and Formatting Print utility (DFSERA10).

Problem Determination: 5, 6, 17h

The following information applies to 17h:

- Print the log records type x'6701'ID=LA3E.
- Use the Log File Select utility DFSERA10.
- Use the following control cards:

```
OPTION   PRINT O=5,V=6701,L=2,C=M,T=X,E=DFSERA30
OPTION   PRINT O=9,V=LA3E,L=4,C=E,T=C,E=DFSERA30
OPTION   PRINT O=5,V=67D0,L=2,C=E,T=X,E=DFSERA30
```

0832

Explanation: While requesting or freeing space in an HDAM, HIDAM, PHDAM, or PHIDAM database, an incorrect free space element (FSE) was found or created in the block whose prefix address is in PSTBUFFA. The current call might not have been completed.

System Action: The application program terminates abnormally.

Programmer Response: To identify which database is in error, obtain the data management block number from PSTDMBNM and the DDIR from the SCD; use the data management block number to find the DDIR number that applies. Reorganize the database to correct FSEs, or do the following:

1. Set the FSE anchor point in the block to zero. This will prevent any more use of the FSEs in that block.
2. Take a dump of the database using the Database Image Copy Utility. This is necessary because backout of activity in this block, which preceded setting the FSE to zero, should not be attempted. Backout will not replace segments correctly if the space expected is not there, and results will be unpredictable.

Problem Determination: 17a, 17b, 17g, 35, and save the log tapes for reference to activity on the incorrect data block.

0833

Explanation: An invalid SYSID was encountered. Register 15 contains the invalid SYSID. This error is probably either a logic error or a destroyed data area.

System Action: IMS terminates abnormally.

Problem Determination: 35

0834

Explanation: While searching for space, Space Management received three consecutive read error returns from the Buffer Handler. An I/O error message was issued by the Buffer Handler prior to this abend.

System Action: The application program terminates abnormally.

Programmer Response: Refer to the I/O error message issued prior to the termination of the transaction.

0835

Explanation: An error was detected in an FDB for a field within an index source segment. The field represented by the FDB was specified in the SUBSEQ or DDATA operand of an XDFLD statement and the FDB indicates that it is a system-related field, but the field name does not begin with /CK or /SX.

System Action: IMS terminates abnormally.

Programmer Response: This is probably an IMS internal error.

Problem Determination: 4, 35

Module: DFSURGU0

0840

Explanation: A user written Segment Edit/Compression routine detected a processing error while attempting compression or expansion services.

System Action: The application abnormally ends.

Programmer Response: Ensure the edit/compression routine has been built and linked properly. Examine the problem related data described in *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

Problem Determination: 4, 17a, 17b, 18, 19, and the source and link listings of the edit/compression routine.

Module: DFSURGU0

0842

Explanation: An error occurred while extending an OSAM data set in a data sharing environment.

System Action: Message DFS0842I was issued prior to the abend indicating the DBDNAME, DDNAME, and DSNAME of the data set that encountered the extend error. The application program terminates abnormally with pseudoabend U0842, and IMS continues processing. However, if DUMP=YES was specified on the DL/I buffer options statement, the application terminates with standard abend U0842, and the control region terminates abnormally.

Programmer Response: Ensure that all database data sets can be shared from all subsystems that share the data set.

Problem Determination: 1, 2, 4, 17

0843

Explanation: The block number passed to DL/I from the user's randomizing routine, when multiplied by the block size, yields a value that exceeds the maximum addressable data address. The data address must be addressable by 32 bits in VSAM or 31 bits in OSAM.

System Action: The processing task is terminated abnormally.

Programmer Response: Examine the value returned from the randomizing routine in DMBDACP. If the block number portion multiplied by the CI size is greater than the corresponding maximum value allowable, change the randomizing routine or reduce the size of the root addressable area.

Problem Determination: 11, 25, 35

0844

Explanation: No space is available in the database, or the data set was defined as DD DSNAME=NULLFILE or DD DUMMY.

System Action: For Fast Path data sets, message DFS2767I or DFS2765W is issued before the abend, indicating that the DDNAME data set is out of space.

For non-Fast Path data sets, message DFS0844I is issued prior to the abend, indicating the DBDNAME and DDNAME of the data set encountering the out-of-space condition. The application program terminates abnormally with pseudoabend U0844, and IMS continues processing. However, if DUMP=YES was specified on the DL/I buffer options statement, the application terminates with standard abend U0844, and the control region terminates abnormally.

Programmer Response: For Fast Path data sets, the size of the data set must be increased. Space might be made available by executing the DEDB Direct Reorganization utility.

For non-Fast Path data sets, the database might be invalid. Run the Database Backout utility or re-create the database, allocating more space. If a LIST VTOC job is run, it might provide misleading information. While offline (using the /DBR command), you must copy the database to a larger space allocation. Then make the database available to the online region using the /START command.

Problem Determination: 4, 12

0845

Explanation: An unexpected condition occurred in DFSDBH00 or DFSDVSM0. This is an IMS system error.

System Action: IMS terminates abnormally.

Problem Determination: 17a, 35. For a pseudoabend, register 14 is saved in the PST in the field named PSTDATA. The content of register 14 is the address in the buffer handler where the abnormal termination was issued.

0846

Explanation: Module DFSDBH00 was posted with an unexpected post code. This is probably an IMS system error.

System Action: IMS terminates abnormally.

Problem Determination: 4, 35

0847

Explanation: An unexpected condition occurred in the OSAM buffer handler. This is an IMS system error. Register 14 contains the address in DFSDBH00 where the abnormal condition was detected.

System Action: IMS terminates abnormally.

Problem Determination: 4

0848

Explanation: All the buffer prefixes in the OSAM buffer subpool have been locked because of write errors.

System Action: The application program terminates abnormally.

Problem Determination: 27, 35

0849

Explanation: Module DFSDLR00 detected a failure and attempted to issue a pseudoabend for a DB PCB that had PROCOPT=GO*x*. The original abend was changed to user abend 0849. The register contents for the original abend code were saved in the last level save area in the PST. This save area starts at label PSTSAVL. The original abend code can be found in the two lower bytes of REG0, which is saved at PSTSAVL+X'14'. The abend code is in hex and must be converted to decimal. After determining the original abend code, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis* for more information on this abend.

System Action: The application program terminates abnormally.

Problem Determination: 17a, 17b

0850

Explanation: DFSDLR00 received an invalid return code from a call to the buffer handler. Pertinent PST fields are described in *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: The application program terminates abnormally.

Programmer Response: Analyze the DBDs you use. Ensure that the DBD you used to create the database and the DBD you used to update the database were the same.

Problem Determination: 17a through 17e

0851

Explanation: For a HISAM or INDEX database, the first segment code in the logical record was not segment code 1. For a description of relevant PST fields and register contents, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: The application program terminates abnormally.

Problem Determination: 17a through 17e

0852

Explanation: In response to a PSTBYLCT call to the buffer handler for either a HISAM, HIDAM, HDAM, PHDAM, or PHIDAM database, the segment code returned was not a valid segment code for the database. For a description of relevant PST fields and register contents, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

Programmer Response: Analyze the database. If there is an invalid pointer, recover the database.

System Action: The application program terminates abnormally.

Problem Determination: 17a through 17e, 35

0853

Explanation: For a HIDAM, HDAM, PHDAM, or PHIDAM database, in attempting to locate a root segment, the segment returned either did not have a segment code of 1, or (for HIDAM or PHIDAM) had a different key value than the key value in the index pointer segment. For a description of relevant PST fields and register contents, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: The application program terminates abnormally.

Problem Determination: 17a through 17e

0854

Explanation: For a HSAM database, a segment code was encountered which was not a valid segment code for the data management block. For a description of relevant PST fields and register contents, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: The application program terminates abnormally.

Problem Determination: 17a through 17e

0855

Explanation: The lock request handler detected an error while processing a lock request. PSTLRPRM contains the request parameters set by the DFSLR macro.

System Action: The application program terminates abnormally.

Problem Determination: 17a, 17b, 17e, 17f, 35

0857

Explanation: The insert position was determined for HIDAM, HDAM, PHDAM, or PHIDAM. Then, in attempting to verify the position, the segment to which the inserted segment would point could not be found starting from its parent. The database would appear to have invalid pointers. For a description of relevant PST fields and register contents, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: The application program terminates abnormally.

Problem Determination: 17a, 17b, 17c, 17g

0858

Explanation: The pair of a physically paired segment could not be located. For a description of relevant PST fields and register contents, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: The application program is terminated abnormally.

Problem Determination: 17a, 17b, 17c, 17g

0859

Explanation: IMS found a logical child on a GET call and the logical parent could not be found. Check the problem-related data described in *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: The application program terminates abnormally.

Problem Determination: 17a through 17e

0860

Explanation: A return error from a call to the database handler occurred.

System Action: The application program terminates abnormally.

Programmer Response: Check problem-related data in *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

Probable causes are:

- Bad insert position in SDBs from retrieve (DFSDLR00).
- Database had bad pointers. Error in DFSDDLE0.
- There was insufficient space in the data set to initially load the data set.

Problem Determination: 4, 17a, 17b, 17g, 18, 19, 35

0861

Explanation: When doing a dependent segment insert in HISAM, or replacing a variable-length segment in HISAM whose length has changed, an invalid segment code was encountered by DFSDDLE0 (LOAD/INSERT) in determining length of segments to the right of the insert point.

System Action: The application program terminates abnormally.

Programmer Response: Probable causes are:

- DBD redone, changing length of segments without reloading database.
- Bad insert position in SDBs from retrieve (DFSDLR00) or replace (DFSDLD00).

To check the problem-related data, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

Problem Determination: 4, 17a, 17b, 17g, 18, 19, 35

0862

Explanation: On insert of logical child/logical parent concatenated segment with logical parent insert rule virtual, format of the user I/O area was correct, but, when attempting to replace logical parent, the key in the logical parent did not match the corresponding portion of the concatenated key of the logical parent in the logical child. Module DFSDLR00 positioned for the logical parent using the concatenated key of the logical parent in the logical child. This position was placed in the SDBPOSC field of the SDB for the logical parent. When subsequent replace of the logical parent was attempted, this position was not consistent with the concatenated key of the logical parent.

System Action: The application program terminates abnormally.

Programmer Response: Check the problem-related data described in *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

Problem Determination: 4, 17a, 17b, 17g, 18, 19, 35

0863

Explanation: An error in the user's edit/compression routine resulted in one of the following:

- The segment length is greater than the defined maximum; or if the segment is fixed length, the length is greater than the defined length +10.
- The key was changed without key compression being specified.

System Action: The application program terminates abnormally.

Programmer Response: Ensure that the edit/compression routine is executing properly. Examine the problem-related data described in *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*. Obtain the information listed under Problem Determination for analysis.

Problem Determination: 4, 17a, 17b, 18, 19, and a source listing of the edit/compression routine.

0864

Explanation: An unexpected return was received from the program isolation ENQ/DEQ routine, or from an invalid post to IWAIT. This is an IMS system error.

System Action: The application program terminates abnormally.

Problem Determination: 17a, 17b, 35

0865

Explanation: When inserting a replacing segment in a HISAM database, a work area was required to hold one LRECL. Space was not available using the ICREATE macro.

System Action: The application program terminates abnormally.

Programmer Response: Increase the storage available to the program.

Problem Determination: 17a, 17b

0867

Explanation: When inserting a logical child, an attempt is made to locate and update a logical parent through the logical child's secondary list. No secondary list entry was found for the just inserted logical child, indicating an incomplete ACBGEN.

System Action: The application program terminates abnormally.

Programmer Response: At entry to this abend, register 11 or register 5 points to the logical child's SDB for which no valid secondary list entry was found. Correct DBD in error or rerun ACBGEN, or both; and then re-execute the program.

Problem Determination: 4, 9, 17d

0868

Explanation: When inserting a HIDAM or PHIDAM root with a twin backward pointer in update mode, the twin forward pointer was found to be zero. With a twin backward pointer specified at the root level, there should never be a twin forward pointer of zero. This indicates an invalid database or the loss of the *all* FFs key in the index record.

System Action: The application program terminates abnormally.

Programmer Response: Analyze the database to see if the twin forward and twin backward chains are valid and if the *all* FFs key is missing in the record. In either case, the database must be recovered.

Problem Determination: 17a through 17g, 35

0869

Explanation: The DL/I buffer handler router was asked to perform an undefined function. This is an IMS system error.

System Action: IMS terminates abnormally.

z/OS System Operator Response: Submit all output to your IMS system programmer. Follow the IMS restart procedures.

Problem Determination: 4, 11, 12, 35

0870

Explanation: Retrieve detected a bad twin chain when positioning for the insert of a HIDAM or PHIDAM root that has PTR=TB. For a description of relevant PST fields and register contents, refer to *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: The application program terminates abnormally.

Problem Determination: 17a through 17d, 35

0880

Explanation: An unexpected condition occurred during processing of a HALDB. The error might have been detected during processing for one of these events:

- Creation of an extended pointer set
- Creation of an indirect list entry
- Correction of an extended pointer set
- Selection of a HALDB partition
- Update of an indirect list entry
- Validation of an extended pointer set

For more detailed information on the reason codes for the abend, see the *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis* manual.

System Action: The application program terminates abnormally.

Problem Determination: 17a through 17d, 35

0881

Explanation: An unexpected condition occurred in module DFSFXC50 during processing of a HALDB PINT (partition initialization) call or UNLD call.

System Action: The application program terminates abnormally.

Problem Determination: 17a through 17d, 35

0882

Explanation: A failure occurred while running the Index/ILDS Rebuild utility (DFSPREC0). The reason code identifies the type of error and action to be taken:

Reason Code	Meaning
04	The call to the Partition Selection and Initialization routine failed due to a severe error.
08	The call to open the prime data set failed.
0C	The call to open the index data set failed.
10	The call from the buffer handler to locate the first block of the prime data set failed.
14	The call to close the prime data set failed.
18	The call to close the index data set failed.
20	The call to insert an indirect list entry failed.
24	An invalid status code was returned on a GN DL/I call.
28	The call from the buffer handler to locate the next block in the database failed.
2C	While scanning a database block, the end of the PSDBs was reached before the PSDB was found for the level of the segment being processed.

System Action: The job terminates abnormally.

Programmer Response: Save the dump and registers provided and call the IBM Support Center for assistance.

Problem Determination: 1, 3, 6, 8, 17a through 17d, 35, 40

0885

Explanation: Pseudoabend issued by DFSDLA00 when a required user exit (DFSDBUX1) could not be loaded or DATXEXIT=YES was specified in the DBDGEN but the user exit set SRCHFLAG to X'FF'.

System Action: IMS stops the database and the transaction is pseudoabended.

Programmer Response: The programmer must ensure that the exit is link-edited into an APF authorized library before restarting IMS and rerunning the transaction. If the second option above applies, either remove the DATXEXIT=YES from the DBDGEN or change the user exit so that it does not set SRCHFLAG to X'FF'.

0888

Explanation: The active format library does not have any members and the IMS system has MFS supported terminals. As a minimum, the active format library should contain the default format blocks generated by the IMS system definition.

System Action: IMS terminates abnormally with an abend code of U0888.

Programmer Response: Correct the format library specification on the FORMATA DD statement to a valid data set.

0889

Explanation: A DEVTYPE macro was issued with an invalid area address.

System Action: IMS terminates abnormally.

***z/OS* System Operator Response:** Notify your IMS system programmer.

Problem Determination: 2, 3, 4, 35

0890

Explanation: A DEVTYPE macro was issued for the ddname of the active format data set, FORMATA or FORMATB, and a not-found condition occurred.

System Action: IMS terminates abnormally.

***z/OS* System Operator Response:** Rerun the job, making sure that there is a valid DD statement for the active format data set with ddname FORMATA or ddname FORMATB. The active format library ddname is identified in the message text of DFS3410I.

Problem Determination: 2, 4

0891

Explanation: The active format data set could not be opened.

System Action: IMS terminates abnormally.

System Operator Response: Contact your IMS system programmer for assistance.

0892

Explanation: Insufficient storage available in the message format block pool (MFBP) to complete the initialization of the pool.

System Action: IMS terminates abnormally.

System Operator Response: Rerun the job after defining a larger format pool with the FBP parameter on the EXEC statement in the IMS procedure.

Programmer Response: See *IMS Version 9: Administration Guide: System* for the factors to be considered when defining pool size.

Problem Determination: 4

0893

Explanation: An I/O error occurred and issued a POINT or FIND macro for the active format library (IMS.FORMATA or IMS.FORMATB) during initialization of the message format block pool.

System Action: IMS terminates abnormally.

Programmer Response: There is probably an error in the PDS directory for the format data set. Ensure that the MFS Utility executed properly, and rerun the job.

Problem Determination: 2, 3, 4, 11, 16

0894

Explanation: An I/O error occurred issuing a READ macro for the active format data set during initialization of the message format block pool, or an invalid directory block was read.

System Action: IMS terminates abnormally.

Programmer Response: There is probably an error in the PDS directory for the format data set. The active format data set must not be updated while IMS is active. Ensure that the MFS utility executed properly, and rerun the job.

Problem Determination: 2, 3, 4, 11, 16

0895

Explanation: Insufficient storage was available in the IMS extended private area to build the PDS directory indexes used to read MFS control blocks from the active MFS format library.

System Action: Rerun the job when more space is available in the IMS extended private area.

0896

Explanation: The DD DUMMY parameter is not supported for the active format data set. The ddname is FORMATA or FORMATB. Refer to message DFS3410I, which will identify which of the ddnames is the active format data set.

System Action: IMS terminates abnormally.

z/OS System Operator Response: Rerun the job with the DD statement corrected to specify a valid data set name.

Problem Determination: 2

0897

Explanation: Insufficient storage was available in the IMS private area to allocate the staging buffers used to read MFS control blocks from the active MFS format library.

System Action: Rerun the job when more space is available in the IMS private area.

0898

Explanation: Insufficient storage was available in the IMS extended private area to build the MFS Dynamic Directory used to read MFS control blocks from the active MFS format library.

System Action: Rerun the job when more space is available in the IMS extended private area.

0899

Explanation: Insufficient storage was available in the IMS private area to allocate the MFS buffer pool control area.

System Action: Rerun the job when more space is available in the IMS private area.

0900

Explanation: Insufficient storage was available in the IMS private area to allocate storage for a dummy ECB required in order to read the MFS format library in 31-bit mode.

System Action: Rerun the job when more space is available in the IMS private area.

0901

Explanation: An error exists in the Security Maintenance utility parameter field.

System Action: IMS terminates abnormally.

Programmer Response: See *IMS Version 9: Utilities Reference: System* for the required format. Correct the error and resubmit the job.

0902

Explanation: JOBLIB does not contain the DFSISDBx or DFSISDCx module specified by the parameter field.

System Action: DFSIMP00 (Security Maintenance utility) terminates abnormally.

System Operator Response: Correct the JCL, and rerun the job.

Problem Determination: 4

0903

Explanation: DD statements required by the Security Maintenance Utility program are missing.

System Action: DFSIMP00 (Security Maintenance Utility) terminates abnormally.

Programmer Response: Register 2 points to the ddname of the statement required. Correct the JCL, and resubmit the job.

Problem Determination: 4

0904

Explanation: During the processing of PDS directory entries by an MFS utility program, an invalid entry with a format block size greater than 32K was found. The MFS format build modules limit the size of the format block to 32K. The directory entry has been corrupted.

System Action: IMS terminates abnormally.

Programmer Response: At entry-to-abend, register 2 points to the directory entry. Register 8 contains the format block size. Delete the invalid entry; then re-execute the program.

0905

Explanation: The block builder was unable to obtain sufficient storage to build the required control blocks.

System Action: IMS terminates abnormally.

Programmer Response: At entry to this abend, register 6 points to the PSB being processed. Increase the region or partition size, and re-execute the program. See message DFS905I.

Problem Determination: 4, 9, 17d, 35

0906

Explanation: A SENSEG statement had an invalid processing option specified.

System Action: IMS terminates abnormally.

Programmer Response: At entry to this abend, register 6 points to the SENSEG name, and register 7 points to the PSB name. Correct the PSB, and re-execute the program. See message DFS906I.

Problem Determination: 4, 9, 17d, 35

0907

Explanation: A PSB had a PCB which referenced a logical DBD and had a PROCOPT of L or LS.

System Action: IMS terminates abnormally.

Programmer Response: At entry to this abend, register 6 points to the PSB name, and register 5 points to the PCB name. Correct the PSB, and re-execute the program.

Problem Determination: 4, 9, 17d, 35

0908

Explanation: The PSB is not a valid PSB.

Note: If no accompanying DFS0908I message is received, then this abend is not issued by IMS, but by a different product.

System Action: IMS terminates abnormally.

Programmer Response: At entry to this abend, register 6 points to the PSB name. Create the PSB, using IMS PSBGEN, and re-execute the program.

Problem Determination: 4, 17d, 35

0909

Explanation: The DBD name is not a valid DBD. Message DFS0909I is issued prior to this abend.

System Action: IMS terminates abnormally.

Programmer Response: At entry to this abend, register 6 points to the DBD. Create the DBD, using IMS DBDGEN, and re-execute the program.

Problem Determination: 4, 17d, 35

0910

Explanation: An internal programming error has occurred while processing the PSB. Message DFS0910I is issued prior to this abend.

System Action: IMS terminates abnormally.

Programmer Response: At entry to this abend, register 6 points to the PSB name which caused the error. Remove the offending PSB from the processing list, and re-execute the program.

Problem Determination: 4, 17d, 35

0911

Explanation: The processing option intent list length was calculated incorrectly for the named PSB. Message DFS0911I is issued prior to this abend.

System Action: IMS terminates abnormally.

Programmer Response: At entry to this abend, register 6 points to the PSB name. This is an internal program logic error. Remove the offending PSB, and re-execute the program.

Problem Determination: 4, 17d, 35

0912

Explanation: The named PSB referenced the named SEGM in the named DBD. The named SEGM does not exist in the named DBD. Message DFS0912I is issued prior to this abend.

System Action: IMS terminates abnormally.

Programmer Response: At entry to this abend, register 5 points to the PSB name, register 6 points to the segment name, and register 7 points to the DBD name. Correct the PSB or DBD, and re-execute the program.

Problem Determination: 4, 17d, 35

0913

Explanation: The named DBD contains an invalid or unknown access method. Message DFS0913I is issued prior to this abend.

System Action: IMS terminates abnormally.

Programmer Response: At entry to this abend, register 6 points to the DBD name being initially loaded, reloaded, or scanned. Correct the DBD, and re-execute the program.

Problem Determination: 4, 17d, 35

0914

Explanation: The PSB contained a SENSEG statement for which there was no corresponding SEGM in the DBD.

System Action: The application program terminates abnormally and the program is stopped.

System Programmer Response: Replace the DBD with a new DBD copy using one of the following, and rerun the ACBGEN utility program.

- BUILD PSB=ALL
- BUILD DBD=dbdname
- BUILD PSB=psbname, DBD=dbdname

Problem Determination: 11, 17a, 17b, 17d, 35

0915

Explanation: The named INDEX DBD has a sequence field length specified that is not equal to the indexed field length. The correct length is indicated. Message DFS0915I is issued prior to this abend.

System Action: IMS terminates abnormally.

Programmer Response: At entry to this abend, register 6 points to the DBD name, and register 5 points to the required length. Correct the DBD in error, and re-execute the program.

Problem Determination: 4, 17d, 35

0916

Explanation: The named DBD requires that a sequence field be specified for the root segment. A sequence field was not specified, or the field was specified as non-unique. Message DFS0916I is issued prior to this abend.

System Action: IMS terminates abnormally.

Programmer Response: At entry to this abend, register 6 points to the DBD name. Correct the DBD, and resubmit the program.

Problem Determination: 4, 17d, 35

0917

Explanation: The first DBD referenced the named SEGM in the second DBD. The SEGM does not exist in the second DBD. Message DFS0917I is issued prior to this abend.

System Action: IMS terminates abnormally.

Programmer Response: At entry to this abend, register 5 points to the referencing DBD, register 6 points to the referenced segment, and register 7 points to the referenced DBD. Correct one or both of the DBDs, and re-execute the program.

Problem Determination: 4, 17d, 35

0918

Explanation: The named PSB contained a SENSEG statement for the named segment. The SENSEG statement referenced a logical child segment as the first part of a segment concatenation. The second part of the concatenation, the logical or physical parent of the logical child, did not have a valid physical parent. Message DFS0918I is issued prior to this abend.

System Action: IMS terminates abnormally.

Programmer Response: At entry to this abend, register 5 points to the PSB name, and register 6 points to the SENSEG name. Correct the PSB in error or the DBDs in error, or both; and then re-execute the program.

Problem Determination: 4, 17d, 35

0919

Explanation: The named PCB in the named PSB contains a KEYLEN parameter which is too small to hold the longest fully concatenated key. The correct length is indicated. Message DFS0919I is issued prior to this abend.

System Action: IMS terminates abnormally.

Programmer Response: At entry to this abend, register 5 points to the PCB name, register 6 points to the PSB name, and register 7 points to the required length. Correct the PSB, and re-execute the program.

Problem Determination: 4, 17d, 35

0920

Explanation: The named PSB contains at least one reference to the named DBD with a PROCOPT of L and at least one additional reference to the same DBD with a PROCOPT of something other than L. The reference might be direct, such as in a PCB statement, or the reference might be indirect, such as in a DBD that references another DBD using logical or index relationships. Message DFS0920I is issued prior to this abend.

System Action: IMS terminates abnormally.

Programmer Response: At entry to this abend, register 5 points to the DBD name and register 6 points to the PSB name. Correct the PSB or one or more of the DBDs, or both, and then re-execute the program.

Problem Determination: 4, 17d, 35

0921

Explanation: The named PSB was loaded. Upon examination it was discovered the PSB was not a valid PSB. Message DFS0921I is issued prior to this abend.

System Action: IMS terminates abnormally.

Programmer Response: At entry to this abend, register 6 points to the PSB name. Check the JCL or the control statements, or both, correct the errors, and then re-execute the program.

Problem Determination: 4, 17d, 35

0922

Explanation: The named DBD was loaded. Upon examination it was discovered the DBD was not a valid DBD. Message DFS0922I is issued prior to this abend.

System Action: IMS terminates abnormally.

Programmer Response: At entry to this abend, register 6 points to the DBD name. Check the JCL or the control statements, or both, correct the errors, and then re-execute the program.

Problem Determination: 4, 17d, 35

0923

Explanation: The indicated logical child segment in the indicated DBD had a BYTES specification shorter than its logical parents fully concatenated key. The minimum acceptable length is indicated. Message DFS0923I is issued prior to this abend.

System Action: IMS terminates abnormally.

Programmer Response: At entry to this abend, register 6 points to the segment name, register 7 points to the DBD name, and register 5 points to the minimum length. Correct the DBD, and re-execute the program.

Problem Determination: 4, 17d, 35

0924

Explanation: The root segment in the named INDEX DBD had a data length that was too small to hold the required index data. The minimum acceptable length is indicated. Message DFS0924I is issued prior to this abend.

System Action: IMS terminates abnormally.

Programmer Response: At entry to this abend, register 6 points to the DBD name, and register 5 points to the minimum length. Correct the DBD in error, and re-execute the program.

Problem Determination: 4, 17d, 35

0925

Explanation: A named logical child segment had a sequence field defined which fell within the logical parent's concatenated key area in the logical child and the key was specified as VIRTUAL. The key must be specified as PHYSICAL if it is to be used as part of the physical twin sequence field. Message DFS0925I is issued prior to this abend.

System Action: IMS terminates abnormally.

Programmer Response: At entry to this abend, register 6 points to the segment name, and register 7 points to the DBD name. Correct the DBD in error, and re-execute the program.

Problem Determination: 4, 17d, 35

0926

Explanation: The indicated PCB in the indicated PSB had an alternative processing sequence specified. The specified secondary index is not valid for the specified SENSEG. Message DFS0926I is issued prior to this abend.

System Action: IMS terminates abnormally.

Programmer Response: At entry to this abend, register 6 points to the SENSEG name, register 7 points to the PCB name, and register 8 points to the PSB name. Correct the PSB or the DBDs, or both, and then re-execute the job.

Problem Determination: 4, 17d, 35

0927

Explanation: The named INDEX DBD specified an indexed field in the INDEXED DBD which did not exist. Message DFS0927I is issued prior to this abend.

System Action: IMS terminates abnormally.

Programmer Response: At entry to this abend, register 6 points to the INDEX DBD name, and register 7 points to the INDEXED DBD name. Correct the DBD in error, and re-execute the program.

Problem Determination: 4, 17d, 35

0928

Explanation: The named INDEX DBD indexes a valid field, but the field is not a sequence field. Message DFS0928I is issued prior to this abend.

System Action: IMS terminates abnormally.

Programmer Response: At entry to this abend, register 6 points to the INDEX DBD name. Correct the DBD in error, and re-execute the program.

Problem Determination: 4, 17d, 35

0929

Explanation: A BLDL was issued for the named member. The member was not found in the DBD or PSB library. Message DFS0929I is issued prior to this abend. Refer to *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis* for the codes and their meanings.

System Action: IMS terminates abnormally.

Programmer Response: At entry to this abend, register 6 points to the member name. Correct the error in the appropriate library, and re-execute the program.

Problem Determination: 4, 17d, 35

0930

Explanation: The named DBD contained an LCHILD statement which referenced the named SEGM in a PAIR= operand. The named SEGM could not be found or the named SEGM was a virtual segment and the source segment contained a PTR=PAIRED operand. Message DFS0930I is issued prior to this abend.

System Action: IMS terminates abnormally.

Programmer Response: At entry to this abend, register 6 points to the DBD name, and register 5 points to the segment name. Correct the DBD, and re-execute the program.

Problem Determination: 4, 17d, 35

0931

Explanation: The named INDEXED DBD had an index relationship with the named INDEX DBD. Either the INDEX DBD did not have a similar relationship to the INDEXED DBD, or another DBD referenced in the named PSB also had an index relationship with the INDEX DBD. Message DFS0931I is issued prior to this abend.

System Action: IMS terminates abnormally.

Programmer Response: At entry to this abend, register 6 points to the PSB name, register 7 points to the INDEX DBD name, and register 5 points to the INDEXED DBD name. Correct the appropriate PSB or DBDs, or both, and then re-execute the program.

Problem Determination: 4, 17d, 35

0932

Explanation: The named INDEX DBD does not have a sequence field defined for the index segment. Message DFS0932I is issued prior to this abend.

System Action: IMS terminates abnormally.

Programmer Response: At entry to this abend, register 6 points to the DBD name. Correct the DBD, and re-execute the program.

Problem Determination: 4, 17d, 35

0933

Explanation: The indicated PSB contained an invalid INDICES operand. The indicated value of the INDICES operand was not a valid index name for the associated SENSEG statement. Message DFS0933I is issued prior to this abend.

System Action: IMS terminates abnormally.

Programmer Response: At entry to this abend, register 6 points to the PSB name, and register 7 points to the INDICES=value. Correct the PSB or DBDs in error, and re-execute the job.

Problem Determination: 4, 17d, 35

0934

Explanation: The named PSB referenced the named logical child SEGM in the named DBD. The logical child requires the logical parent's concatenated key to be stored physically but VIRTUAL was specified, or the LP segment could not be located in the specified DBD. Message DFS0934I is issued prior to this abend.

System Action: IMS terminates abnormally.

Programmer Response: At entry to this abend, register 5 points to the PSB name, register 6 points to the segment name, and register 7 points to the DBD name. Correct the appropriate DBD, and re-execute the program.

Problem Determination: 4, 17d, 35

0935

Explanation: The named PSB referenced the named DBD through a SENSEG statement. However, a logical structure or relationship within this segment definition is invalid. Message DFS0935I is issued prior to this abend.

System Action: IMS terminates abnormally.

Programmer Response: At entry to this abend, register 7 points to the PSB name, register 6 points to the segment name, and register 5 points to the DBD name. Correct the named DBD or the logical DBD referenced by the PSB, and re-execute the program.

Problem Determination: 4, 17d, 35

0936

Explanation: The named SEGM was referenced in the named PSB with a PROCOPT of L or LS. The SEGM is a virtual segment and as such cannot be loaded. Message DFS0936I is issued prior to this abend.

System Action: IMS terminates abnormally.

Programmer Response: At entry to this abend, register 5 points to the name of the invalid segment, and register 6 points to the PSB name. Correct the PSB, and re-execute the program.

Problem Determination: 4, 17d, 35

0937

Explanation: The named DBD specified the named segment as a virtual segment. The SOURCE parameter in the SEGM statement contained more than one operand. The probable cause is a missing pair of parentheses on the SOURCE operand. Message DFS0937I is issued prior to this abend.

System Action: IMS terminates abnormally.

Programmer Response: At entry to this abend, register 6 points to the segment name, and register 5 points to the DBD name. Correct DBD source segments, and re-execute DBDGEN.

Problem Determination: 4, 17d, 35

0938

Explanation: The named database PCB within the named PSB had no SENSEG statements defined at PSBGEN time. The PSBGEN was invalid. Message DFS0945I is issued prior to this abend.

System Action: IMS terminates abnormally.

Programmer Response: At entry to this abend, register 5 points to the PSB name, and register 6 points to the PCB name. Correct PSB source statements, and re-execute PSBGEN.

Problem Determination: 4, 17d, 35

0939

Explanation: The indicated INDEX DBD contained an INDEX= operand which specified a field name with a /CK as the first 3 characters. Message DFS0946I is issued prior to this abend.

System Action: IMS terminates abnormally.

Programmer Response: At entry to this abend, register 6 points to the DBD name in error. Correct the DBD, and re-execute the job.

Problem Determination: 4, 17d, 35

0941

Explanation: The indicated segment in the indicated DBD was a physically paired logical child and of variable length. The opposite pair was fixed length. Physically paired segments must have the same length attributes.

System Action: IMS terminates abnormally.

Programmer Response: At entry to abend, register 6 points to the segment name, and register 7 points to the DBD name. Correct the DBD in error, and re-execute the job.

Problem Determination: 4, 17d, 35

0942

Explanation: The indicated INDEX DBD contained an LCHILD statement that contained the same database name for the indexed database as the name for this index database.

System Action: IMS terminates abnormally.

Programmer Response: At entry to this abend, register 6 points to the DBD name. Correct the DBD, and re-execute the job.

Problem Determination: 4, 17d, 35

0943

Explanation: An invalid logical relationship exists:

- A logical child references the named segment in the indicated database, and the named logical parent does not have an LCHILD statement.
- A logical parent references a logical child segment in the named database, and the logical child does not have a reference for the logical parent.
- A logical DBD does not contain a reference to the named segment in the SOURCE= operand that references its corresponding logical child or logical parent.

System Action: IMS terminates abnormally.

Programmer Response: At entry to this abend, register 7 points to the DBD name, and register 8 points to the referenced segment name. Correct the DBD, and rerun the job.

Problem Determination: 4, 17d, 35

0944

Explanation: Message ID not found in the message text module (DFSUMGT0).

System Action: IMS terminates abnormally.

Programmer Response: Ensure invalid modifications were not made to the message text module (DFSUMGT0).

Problem Determination: 1, 2, 3, 4, 8, 9, 12, 13, 35

0945

Explanation: Incorrect number of parameters passed to the message formatter, module DFSUMSG0, through the UERR macro.

System Action: IMS terminates abnormally.

Programmer Response: Ensure that invalid program modifications were not made to the message text module (DFSUMGT0).

Problem Determination: 1, 2, 3, 4, 9, 12, 13, 35

0947

Explanation: An invalid secondary list code has been found in a data management block. This is an IMS system error.

System Action: IMS terminates abnormally.

Programmer Response: At entry to this abend, register 8 points to the invalid code, register 5 points to the DDIR entry being processed, and register 7 points to the PSB being processed.

Problem Determination: 1, 2, 3, 4, 9, 35

0948

Explanation: The SYSPRINT data set had a permanent I/O error.

System Action: IMS terminates abnormally.

Programmer Response: Check LOGREC to determine the unit causing the error and the reason for the error, and resubmit the job.

Problem Determination: 1, 2, 3, 4, 9, 23, 35

0949

Explanation: The SYSPRINT data set could not be opened.

System Action: IMS terminates abnormally.

Programmer Response: Ensure that the JCL contains a valid DD statement for SYSPRINT, and resubmit the job.

Problem Determination: 1, 2, 3, 4, 9, 23, 35

0950

Explanation: The work data set generator (DFSDSEH0) was attempting to read a control data set. The data set was either not opened successfully or, if opened, contained either no data or erroneous data.

System Action: The program terminates abnormally.

Programmer Response: The control data set must be specified by a DD statement named DFSURCDS. The control data set must have been generated by the Database Prereorganization utility (DFSURPR0). Refer to *IMS Version 9: Utilities Reference: Database and Transaction Manager*.

Problem Determination: 1, 2, 3, 4, 17d, 18 and 19, and a printout of the DFSURCDS data set.

0951

Explanation: The work data set generator utility (DFSDSEH0) was performing a dynamic limit-check as described in *IMS Version 9: Utilities Reference: Database and Transaction Manager*, and the limit-check failed. (See also the discussion of the Database Prefix Resolution utility in that section.)

System Action: The Database Prereorganization utility (DFSURPR0) will have provided diagnostic messages during its execution that indicate the segments for which the limit-check failure occurred.

Programmer Response: Refer to the above-referenced section of *IMS Version 9: Utilities Reference: Database and Transaction Manager* for the appropriate action to take.

0952

Explanation: The work data set generator program (DFSDSEH0) was attempting to open a work data set. It was not opened successfully. The work data set must be specified by a DD statement named DFSURWF1.

System Action: The program terminates abnormally.

Programmer Response: Refer to *IMS Version 9: Utilities Reference: Database and Transaction Manager* regarding this DD statement. This DD statement must be present during initial database load, database reload, and database scan whenever the affected database contains segments involved in logical relationships.

Problem Determination: 4, 8

0953

Explanation: The work data set generator (DFSDSEH0) was attempting to locate DL/I control blocks for segments involved in a logical relationship. They could not be found.

System Action: The program terminates abnormally.

Programmer Response: Verify that valid DBDs are available for the databases being initially loaded, reloaded, or scanned.

Problem Determination: 1, 2, 3, 4, 17d, and 20, a printout of the DFSURWF1 data set, and a printout of the DFSURCDS.

0955

Explanation: This abend code is issued by modules DFSURGP0, DFSURGS0, and DFSURG10 when an abend control statement is supplied in the SYSIN input stream.

System Action: The abend is issued at the end of program execution.

Master Terminal Operator Response: Determine why the abend statement. was supplied to the input, and take appropriate action.

Problem Determination: 1, 2, 3, 4, 17d, and 20, a printout of DFSWRF1, or a printout of DFSURWF3, or both.

0956

Explanation: Logical parent concatenated key length is defined as zero bytes long.

System Action: IMS terminates abnormally.

Programmer Response: This could be caused by field definition specifying NAME=XX rather than NAME=(XX,SEQ,U). Correct the field definition, and resubmit the job.

Problem Determination: 1, 2, 3, 4, 17d, 35

0957

Explanation: The referenced segment is physically paired. Either the two intersection data lengths are not equal (for fixed-length segments); or the maximum intersection data lengths for the two paired segments are not equal. Refer to DFS0951I for more information.

System Action: IMS terminates abnormally.

Programmer Response: At entry to this abend, register 6 points to the referenced segment name. Register 2 and register 4 contain the two calculated data lengths. Correct the DBD, and re-execute the job.

Problem Determination: 4, 17d, 35

0958

Explanation: A PSB cannot reference a primary index DBD. *nnnnnnn* is the referenced DBD name. Refer to message DFS0958I for more information.

System Action: IMS terminates abnormally.

Programmer Response: Change the PSB so that the primary index will not be processed, and resubmit the job.

Problem Determination: 3, 4, 17d, 35

0959

Explanation: An error exists in the logical child SEGM statement in the database referenced by message DFS0953I. It is not permissible to specify a direct pointer to a database with HISAM organization. PTR=LP is an incorrect specification; only PTR= should be specified.

System Action: If running under DL/I, IMS terminates abnormally.

Programmer Response: Correct the logical child SEGM statement to remove the LP specification. Specify instead only PTR=, and reassemble the DBD. Rerun the job.

0960

Explanation: An error exists in the LCHILD statement in the database referenced in message DFS0954I. You have specified either PTR=SNGL or PTR=DBLE; both specifications are incorrect. It is not permissible to specify a direct pointer to a database with HISAM organization.

System Action: If running under DL/I, IMS terminates abnormally.

Programmer Response: Correct the LCHILD statement, reassemble the DBD, and rerun the job.

0961

Explanation: An error exists in the XDFLD statement in a DBD that points to the Shared Index (see message DFS0955I). You have specified more than one XDFLD constant of the same value. Each XDFLD statement for a Shared Index must have a unique CONST= specification.

System Action: If running under DL/I, IMS terminates abnormally.

Programmer Response: Correct the XDFLD statements in error, reassemble the DBDs, and rerun the job.

0962

Explanation: The SENSEG statements within the named PSB were not specified in hierarchic sequence (top to bottom, left to right). Refer to message DFS956I for more information.

System Action: IMS terminates abnormally.

Programmer Response: Correct the order of the SENSEG statements, and re-execute the job.

0963

Explanation: Backout was unable to open the checkpoint control data set (SYSIN), or the DEVTYPE macro failed.

System Action: The program terminates abnormally.

Programmer Response: Correct the SYSIN DD statement or the data set, or both, and rerun backout.

Problem Determination: 2, 4

0965

Explanation: There is an inconsistency in the DL/I control blocks involving a segment in a database being reorganized or initially loaded. Control blocks for a logically related database are incomplete or in error. This might be an IMS system error, or an improperly defined logical relationship.

System Action: The IMS utility prereorganization module (DFSURPR0) terminates abnormally.

Programmer Response: Verify that the DBDs for all logically related databases are accurate and available.

Problem Determination: 2, 8, 11, 18, 35

0966

Explanation: The PCB contains a PROCOPT of H but the DBD is not a DEDB. The PROCOPT H is only valid for a DEDB. Message DFS0964I is issued prior to this abend and contains the name of the PCB.

System Action: IMS terminates abnormally.

Programmer Response: At entry to this abend, register 6 points to the PCB name and register 7 points to the PSB name. Correct the PSB, and run the program again.

Problem Determination: 4, 17d, 35

0967

Explanation: The PSB contains more than one explicit reference to a PHIDAM DBD with a PROCOPT of L or LS. Message DFS1008I is issued prior to this abend and contains the name of the PSB.

System Action: IMS terminates abnormally.

Programmer Response: At entry to this abend, register 6 points to the PSB name and register 5 points to the DBD name. Correct the PSB and run the program again.

Programmer Response: 4, 17d, 35

0969

Explanation: Reading a change accumulation data set, a detail record was encountered before a header record, or a record with an invalid record type code was encountered.

System Action: IMS terminates abnormally.

Programmer Response: Correct the problem, and rerun the job.

Problem Determination: 1, 2, 3, 4

0970

Explanation: One of the several possible error conditions occurred while restart processing was attempting to determine the checkpoint to be used in the restart. Register 10 at entry to abend contains a return code that pinpoints the error. For the meaning of the code, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: IMS terminates abnormally.

Programmer Response: Be sure that all proper log data sets are allocated to the control region. Also, be sure that enough storage is allocated to the control region. This abend is probably an IMS system error. For more detailed information about the failure, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

Problem Determination: 4, 5, 17b, 35

0971

Explanation: One of several possible error conditions occurred while restart was in progress. Register 15 at entry to abend contains one of the following codes:

Code (Hex)	Meaning

01 An attempt to open the system data sets failed. A message indicating which data set failed to open is also provided.

02 Restart was unable to obtain storage for its backout table, DFSRPSTB. Ensure that the control region was allocated enough storage and rerun.

03 An internal error occurred in attempting to dequeue a LCRE.

04 An internal error occurred in attempting to release a LCRE.

05 An internal error occurred in attempting to dequeue a RRE.

06 An internal error occurred in attempting to release a RRE.

System Action: IMS terminates abnormally.

Programmer Response: For codes 01-02 the problem can probably be resolved by examining the JCL and issued messages. For codes 03-06 an internal examination of the problem will be required.

Problem Determination: 4, 5, 17b, 35

0979

Explanation: The database change logger, DFSRDBL0, encountered an error condition or a process failure and cannot complete its request processing. Register 15 contains a hexadecimal reason code. For the meaning of the code, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: IMS terminates with a dump.

Programmer Response: This is an IMS internal logic error.

Problem Determination: 1, 4, 11, 35

0982

Explanation: Emergency restart was unable to read the backout queue for the referenced program and database.

System Action: IMS terminates abnormally.

Programmer Response: If this error occurred because the backout records have been archived and are no longer in the OLDS, use the Database Backout utility with the SLDS as input to perform the backout.

Problem Determination: 1, 2, 3, 4, 5

0985

Explanation: Emergency restart was unable to perform a backout. Register 15 at entry to abend contains a return code, which is described in *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: IMS terminates abnormally.

Problem Determination: 4, 5, 17b, 35

0986

Explanation: A segment in a logical database has specified as its source a segment in another logical database. Refer to message DFS2425I immediately preceding this abend.

0987

Explanation: An LCHILD statement in an index DBD has specified an incorrect segment name for the indexed segment. Refer to message DFS2426I immediately preceding this abend.

0988

Explanation: An LCHILD statement in an indexed DBD refers to a nonexistent segment in the index DBD. Refer to message DFS2427I immediately preceding this abend.

0989

Explanation: In resolving index relationships, module DFSDLBL0 found that an index DBD was referenced by multiple LCHILD statements for indexed segments. See accompanying message DFS2428I for the name of the index DBD.

System Action: IMS terminates abnormally.

Programmer Response: Revise the references in the indexed DBDs so that each indexed segment has its own unique index.

0990

Explanation: Module DFSDLBL0 detected an error in the order that sibling segments were referenced in a logical DBD or PSB. The sibling segment dependents of a parent with PTR=HIER or in a HISAM DBD cannot be referenced in a different order from that established in the physical DBD. Refer to message DFS2429I immediately preceding this abend.

System Action: IMS terminates abnormally.

Programmer Response: Recode the logical DBD or PSB, and re-execute the procedure.

0991

Explanation: The logical child destination parent concatenation is invalid. Message DFS2430I always accompanies this abend.

System Action: IMS terminates with a dump.

Programmer Response: Follow the steps indicated by DFS2430I.

0992

Explanation: A DBD was referenced in an LCHILD statement as an index DBD invalidly. The referenced DBD was not designated as ACCESS=INDEX. Further information is given in the DFS2431I message which precedes the abend.

System Action: IMS terminates abnormally.

Programmer Response: Correct the DBDs and rerun the job.

0993

Explanation: An invalid field name was referenced in a SENFLD statement. See message DFS2432I for additional information.

System Action: IMS terminates abnormally.

Programmer Response: Correct the PSB, and rerun the job.

0994

Explanation: Field mapping specified in PSBGEN causes destructive overlap. See message DFS2433I for additional information.

System Action: IMS terminates abnormally.

Programmer Response: Correct the PSB, and rerun the job.

0995

Explanation: PCB of segment to be inserted does not specify sensitivity to sequence field. See message DFS2434I for additional information.

System Action: IMS terminates abnormally.

Programmer Response: Correct the PSB, and rerun the job.

0996

Explanation: Field level sensitivity has been specified for a logical child with PROCOPT=I or L. See message DFS2435I for additional information.

System Action: IMS terminates abnormally.

Programmer Response: Correct the PSB, and rerun the job.

0997

Explanation: The required PSB control block cannot be built because the logical relationships involved cause internal processing limits to be exceeded. Message DFS2436I was issued, indicating the PSB and PCB for which this occurred.

System Action: IMS terminates abnormally after issuing message DFS2436I.

Programmer Response: Modify the PSB or the DBDs, or both, to reduce the number of SENSEG statements in the PCB that reference LOGICAL CHILD/ LOGICAL PARENT concatenations. re-execute PSBGEN, then re-execute the job.

0998

Explanation: A field defined for a virtual logical child did not fit in the virtual logical child. The field must begin and end within the logical child.

System Action: Message DFS2437I is issued, and IMS terminates abnormally.

Programmer Response: Correct the DBD, and rerun the job. The FIELD statement immediately after the definition of the logical child is wrong. Either the field did not start within the logical child, or the field was too long to fit within the logical child.

1001

Explanation: The batch DL/I or DBB region could not be initialized because one of the databases used by the PSB, named in the third positional operand of the PARM field on the EXEC job control statement is an MSDB or DEDB. A subcode is set in Register 15. For the meaning of the code, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: The batch region is terminated abnormally.

Programmer Response: Correct the PSB, re-execute the PSBGEN, and rerun the job. If all PCBs in the PSB have access to an MSDB or DEDB, a Fast Path (IFP) region procedure should be used.

If batch backout is being attempted in a batch DL/1 region, rerun the job with a DBB region procedure.

Problem Determination: 17a, d

1003

Explanation: A Fast Path (IFP) region could not be initialized because the set timer (STIMER) option in the tenth positional operand of the PARM field on the EXEC job control statement was incorrectly specified.

System Action: The dependent region is terminated abnormally.

Programmer Response: Correct the STIMER operand on the EXEC job control statement and rerun the job.

Problem Determination: 8, 11

1004

Explanation: The Fast Path (IFP) region could not be initialized because the abnormal termination limit count (TLIM) option in the seventh positional operand of the PARM field on the EXEC job control statement was incorrectly specified.

System Action: The dependent region is terminated abnormally.

Programmer Response: Correct the TLIM operand on the EXEC job control statement, and rerun the job.

1005

Explanation: A batch message processing (BMP) step or a Fast Path (IFP) region was not scheduled for one of the following reasons:

- The dependent region was a BMP, but the PSB was defined as a Fast Path application.
- The dependent region was an IFP, but the PSB was not defined as a Fast Path application.
- The dependent region was an IFP, but the PSB was defined as a message-driven application and the subsystem type was DBCTL.
- The dependent region was an IFP and the PSB was defined as a Fast Path application, but the application was neither message-driven nor a Fast Path utility.

System Action: The dependent region is abnormally terminated.

Programmer Response: Determine the cause of the problem, and make the appropriate correction.

Problem Determination: 8, 10, 11

1006

Explanation: The number of buffers requested for page fixing exceeds the total number of buffers currently available. This abend can be issued for any region that has been defined to access Fast Path databases.

System Action: The dependent region is terminated abnormally.

Programmer Response: After checking the NBA and OBA operands specified on the EXEC job control statement, either

- Decrease the operand values and rerun the job, or
- Wait for another region to terminate, and rerun the job.

Problem Determination: 8, 10, 11

1007

Explanation: During a Fast Path (IFP) initialization, program DBFCPY00 detected that the scheduled Fast-Path PSB contained one or more GSAM PCBs.

System Action: The dependent region is terminated abnormally.

Programmer Response: The PSB in error needs to be corrected. Either redefine the PSB as a non-Fast Path application, or remove the GSAM PCBs from the PSB.

Problem Determination: 4, 9, 18, 19

1008

Explanation: During a MPP, BMP, or IFP dependent region termination, program DBFATRM0 detected an error.

- An IFP message-driven application program returned normally but without a QC status code posted in the I/O PCB; or without releasing the Fast Path buffers.
- An application program returned normally without releasing the buffers.

System Action: IMS continues processing.

Programmer Response: Correct the application program. For a message-driven application program, return control to the IMS program controller only after a 'QC' status code is posted in the I/O PCB; else after issuing a "SYNC" or a "ROLB" call to release the buffers.

Problem Determination: 17a

1009

Explanation: Either IFP was specified for the region type and Fast Path was not generated for this IMS system or a critical condition that should not occur was detected in modules that process IFP region initialization and termination. A subcode is set in register 15. For the meaning of the code, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: The IMS control region or the dependent region terminates abnormally.

Problem Determination: 1, 4, 5, 35

1010

Explanation: This is a system error. The segment pointer in an ECNT entry has already been used for another segment.

System Action: The IMS control region is terminated abnormally.

Problem Determination: None.

1011

Explanation: IMS Fast Path initialization failed. For an explanation, refer to any error message that was issued before this abend occurred. The most likely cause is insufficient storage in CSA. For additional information, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: The IMS control region is terminated abnormally.

Programmer Response: Determine the cause of failure as indicated by error messages and dump analysis. If the abend occurred because of insufficient storage, increase CSA storage allocations.

Problem Determination: 3

1012

Explanation: IMS Fast Path MSDB load determination process failed. For an explanation, refer to any error message issued before this abend occurred.

If MSDBABND=Y is the first statement of the DBFMSDBx member of IMS.PROCLIB, this abend is issued when no MSDBs can be loaded due to errors in the MSDBINIT data set.

If MSDBABND=C is the first statement of the DBFMSDBx member of IMS.PROCLIB, this abend is issued when an error occurs during the writing of the MSDBs to the MSDBCPN data set in the initial checkpoint after IMS startup.

If MSDBABND=I is the first card in the DBFMSDBx member of IMS.PROCLIB, this abend is issued when an error occurs during the initial load of the MSDBs from the MSDBINIT data set as described in option 'Y' above, or there are no segments in the MSDBINIT data set for one or more defined MSDBs.

If MSDBABND=A is the first card of the DBFMSDBx member of IMS.PROCLIB, this abend is issued as described in options 'C' and 'I' above.

If MSDBABND=B is the first statement of the DBFMSDBx member of IMS.PROCLIB, this abend is issued as described in options 'Y' and 'C' above.

System Action: The IMS control region is terminated abnormally.

Problem Determination: 3

1013

Explanation: During dependent region create thread (scheduling call), program DBFCPY00 detected that a PCB referenced more segments than were included in the associated DEDB's DBD.

System Action: The dependent region is terminated abnormally.

Programmer Response: There is an inconsistency between the PSB and the DBD. The DBD has been changed on DBDLIB. When ACBGEN was run, the DBD was not rebuilt because BUILD PSB was specified, but BUILD DBD was not.

1014

Explanation: Module DBFXSL30 attempted to deactivate the dependent region using the SUSPEND macro. Register 4 contains the return code. For the meaning of the code, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: The Fast Path dependent region terminates abnormally.

Problem Determination: The contents of register 4, together with a storage dump, should be enough to locate the final cause of the abend.

1015

Explanation: The IMSAUTH SVC encountered a problem while trying to page fix or page free storage. Register 2 contains FIX or FREE. Register 15 contains the IMSAUTH PGFIX/PGFREE return code. For a description of these codes, see "IMODULE Return Codes" on page 571.

System Action: The IMS control region is terminated abnormally.

Problem Determination: 4, 35

1016

Explanation: The ECNT names in the MSDB checkpoint and in the IMS system do not match because of a control block change.

System Action: The IMS control region is terminated abnormally.

Programmer Response: Restart IMS with the appropriate system.

1017

Explanation: Module DBFDBDL0 attempted to convert a virtual to a real address and encountered an error. Register 15 contains a return code, which is described in *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

Problem Determination: 35

1018

Explanation: An error occurred in sequential dependent (SDEP) processing during a resynchronization commit request.

System Action: The IMS control region terminates abnormally.

Programmer Response: For additional information, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

Problem Determination: 1, 4, 5, 6, 15, 36

1019

Explanation: An invalid call was made to the Fast Path Queue Manager. This abend is caused by an internal program logic or interface error.

System Action: IMS terminates abnormally.

Programmer Response: Correct the call interface or contact your IBM Support Center for assistance.

Problem Determination: 4, 5, 11, 24

1020

Explanation: The Fast Path asynchronous task has terminated abnormally, and this abend is issued to stop the rest of the IMS system.

System Action: IMS terminates abnormally.

Programmer Response: Correct the problem, and rerun the job.

System Operator Response: Contact the IMS system programmer.

1021

Explanation: Invalid data was returned from a DEDB randomizing module. One of the following occurred:

- Register 0 is not a valid anchor point offset within the DEDB.
- Register 1 is not a valid DMAC address.
- The return code in register 15 is not 0 or 4.

System Action: The Fast Path dependent region terminates abnormally.

Programmer Response: Correct the error in the randomizing module.

1022

Explanation: A LOCESCD macro failed to locate the Fast Path SCD extension identified by ESCD.

System Action: IMS terminates the region abnormally.

Programmer Response: Probable linkage editor errors in the system definition process or the SCD indicate that the Fast Path is installed erroneously.

Problem Determination: 35

1023

Explanation: The Fast Path message input edit routine detected that the exit routine had accepted, and moved into the EMHB buffer, an input message that was larger than the maximum length defined in the TERMINAL macro in the IMS system definition.

System Action: IMS terminates abnormally.

System Programmer Response: Change the user input edit routine (defined by the FPCTRL macro) to compare the EMHBMXLN field to the input message length and set a return code of X'1C' if the message length is greater than the EMHBMXLN field. Do not move the message to the EMHB buffer.

Problem Determination: 4, 10, 12, 35

1024

Explanation: The Fast Path application program issued a GU call to the I/O PCB after receiving a QC status code on the previous GU call.

System Action: IMS terminates the message-driven application program abnormally.

Programmer Response: Return to the program controller after a QC status code has been issued instead of issuing another GU call to the I/O PCB.

1025

Explanation: Module DBFIRC10 detected an invalid return code after the DL/I call was processed by the Fast Path call analyzer.

System Action: IMS terminates the Fast Path application program abnormally.

Programmer Response: Proceed with the Problem Determination.

Problem Determination: 1, 4, 5, 35

1026

Explanation: An IMS Fast Path module has detected a condition that should not occur and has issued the DBFDEBUG macro to describe the condition.

System Action: The Fast Path dependent region terminates abnormally.

Problem Determination: See the messages identified as DFS2712I issued before the abend for the name of the module, the register contents, and (depending on the module) a numeric subcode in a register. Also, see abend U1026 in *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis* for detailed diagnostic information.

1027

Explanation: This is an internal IMS error. An error has occurred while attempting to enqueue or dequeue a Fast Path resource.

System Action: The dependent region terminates abnormally. If the error occurs while holding critical resources, the control region will abend with abend U0113.

Programmer Response: For the codes and their meanings see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

Problem Determination: 4, 8, 12, 35

1028

Explanation: During execution of the High Speed Reorganization utility, a severe error was detected in the area being reorganized. An SDUMP is taken, with the title of the dump corresponding to the subcode *nn* below. Register 3 contains the failure subcode in the symptom dump; register 11 in the save area at entry to the routine UHREDUMP contains the address of the utility work area.

Subcode	Module	Meaning
10	DBFUHAC7	RAP RBA NOT FOUND IN BUFFERS
11	DBFUHRE0	RAP CI INVALID TYPE
12	DBFUHAC7	KEYS ARE NOT ASCENDING
14	DBFUHCS7	INVALID PCL POINTER
15	DBFUHCS7	INVALID PCF POINTER
17	DBFUHRD7	INVALID SSPT POINTERS
18	DBFUHAC7	SEGMENT CODE DOES NOT MATCH SDBF
19	DBFUHAC7	SEGMENT LENGTH NOT WITHIN LIMITS

Module: DBFUHRE0

1029

Explanation: Module DBFXWU30 attempted to reactivate a dependent region that was not deactivated.

System Action: The Fast Path dependent region terminates abnormally.

Master Terminal Operator Response: Enter a `/CHECKPOINT ABDUMP` command to get a control region dump.

Problem Determination: Register 1, saved at entry to the module, points to the EPST in error. A control region and a dependent region dump are needed.

1030

Explanation: Module DBFXTCU0 attempted to reactivate a dependent region that was not deactivated.

System Action: The Fast Path dependent region terminates abnormally.

Master Terminal Operator Response: Enter a `/CHECKPOINT ABDUMP` command to get a control region dump.

Problem Determination: Register 1, saved at entry to the module, points to the EPST in error. A control region and a dependent region dump are needed.

1031

Explanation: The IMSAUTH SVC encountered a problem while trying to page fix or page free storage. Register 2 contains FIX or FREE. Register 15 contains the IMSAUTH PGFIX/PGFREE return code. For a description of these codes, see “IMODULE Return Codes” on page 571.

System Action: The IMS control region is terminated abnormally.

Problem Determination: 4, 35

1032

Explanation: Module DBFDBDP0 attempted to convert the virtual into the real address, and an error occurred. Register 15 contains a return code, which is described in *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

Programmer Response: None.

Problem Determination: 4, 35

1033

Explanation: The application program required more Fast Path database buffers than were specified by the NBA and OBA parameters in the dependent region JCL parameters.

System Action: IMS terminates the message-driven application program.

Programmer Response: Increase the NBA parameters or the OBA parameters, or both, and then restart the message-driven dependent region.

1034

Explanation: An ISWITCH from the dependent region to the control region (or from the control region to the dependent region) failed.

System Action: The task is terminated abnormally.

Programmer Response: This error condition should

not occur. Contact your IBM Support Center for assistance.

1035

Explanation: A search of the DEDB area name list (DBFAREA) for a specified ddname resulted in a 'not found' condition.

System Action: The task terminates abnormally.

Programmer Response: This error condition should not occur.

Problem Determination: 4, 35

1036

Explanation: The error message number, contained in register 8, is not included in the error message table used by the abending module, DBFMER00.

System Action: Task terminates abnormally.

Programmer Response: Because this error condition should not occur, save this dump.

Problem Determination: 1, 2, 3, 4, 11, 35

1037

Explanation: During an emergency restart, an incomplete set of DEDB log records were found. (Incomplete log records are X'5950' records without a X'5937' or a X'37' record.) Possible reasons for this failure are I/O errors reading CIs or Area open errors.

System Action: IMS terminates abnormally.

Programmer Response: Run the Log Recovery utility (DFSULTR0) in CLS mode with PSBLIST=YES against the previous OLDS (input OLDS to emergency restart). If the Log Recovery utility issues message DFS3279I, follow the steps described in the Programmer Response section of the message. Then attempt a new emergency restart.

1038

Explanation: During an emergency restart, a VSAM GENCB macro was executed and a nonzero return code was returned from VSAM.

System Action: IMS is abnormally terminated.

Programmer Response: Register 15 contains the return code and register 2 contains the reason code from VSAM. For an explanation of the VSAM return and reason codes, see *DFSMS/MVS Macro Instructions for Data Sets*.

Problem Determination: 4, 35

1039

Explanation: The abend option for FP DEDB online utility was selected.

System Action: After processing is complete, the utility ends abnormally with a dump.

Programmer Response: None.

Problem Determination: None.

1041

Explanation: The high level programming interface, HLPI, found a condition caused by a programming error, or DL/I returned a status code to HLPI indicating a programming error.

System Action: IMS terminates abnormally with a dump, and message DFS1041 is issued.

Programmer Response: For an explanation of the status codes, see *IMS Version 9: Application Programming: EXEC DLI Commands for CICS and IMS*. Correct the application program.

Problem Determination: 4, 11, 19 and obtain a listing of macro DFSHLPDS.

1046

Explanation: An IMS Fast Path SDEP utility has detected a condition that should not occur and has issued the DBFDEBUG macro to describe the condition.

System Action: The Fast Path SDEP utility terminates abnormally.

Problem Determination: See message DFS2712I, issued prior to the abend, for the name of the module, the register contents, and (depending on the module) a numeric subcode in a register. Also, see ABENDU1026 in *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis* for detailed diagnostic information.

1050

Explanation: During online change, the scan routine failed after attempting to retrieve the next control block.

System Action: The control region terminates abnormally.

Programmer Response: The Security Maintenance utility matrices might be inconsistent with the current number of resources in the IMS system.

Problem Determination: 4, 39

1051

Explanation: During on-line change, an unexpected condition occurred processing Fast Path DEDB changes.

System Action: The control region terminates abnormally.

Programmer Response: Contact the IBM Support Center.

Problem Determination: 4, 36

1060

Explanation: The DFSCTL data set contains an error. Accompanying error messages DFS0491A and DFS0492I describe the error.

System Action: The region is terminated.

Programmer Response: Correct the error based on the information in the messages.

1061

Explanation: The GETMAIN routine was unable to obtain storage for HSSP control blocks.

System Action: The region is terminated.

Programmer Response: Increase the size of the REGION parameters; then resubmit the job. If this abend persists, wait until CSA usage diminishes before resubmitting the job.

1062

Explanation: The high-speed sequential-processing (HSSP) image copy failed.

System Action: The region is terminated.

Programmer Response: Correct the problem based on the information in message DFS0531I or DFS0532I, or both.

1063

Explanation: Area private buffers were on the NBA/OBA buffer chain, or NBA/OBA buffers were on the area private buffer chain. This is an internal IMS system error.

System Action: The region is terminated.

Programmer Response: Contact the IBM Support Center for help in determining the problem.

1064

Explanation: When HSSP finishes processing an area, it releases the private buffer pool after all private buffers are returned. HSSP was unable to release the private buffer pool because some private buffers had not been returned. This is an internal IMS system error. Register 15 contains a subcode described in *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: The IMS control region is terminated.

Programmer Response: Contact the IBM Support Center for help in determining the problem.

1065

Explanation: An application made a call with a PCB that is defined with PROCOPT H and PROCOPT GO. This combination of processing options is invalid.

System Action: The dependent region is terminated.

Programmer Response: Correct the invalid combination of processing options, or use another PCB.

1070

Explanation: The IMODULE GETMAIN request for storage for a private buffer pool in subpool 231 of the IMS control region, or the request to page fix such storage, was unsuccessful.

System Action: IMS terminates abnormally.

Programmer Response: Consult your z/OS system programmer, and increase the CSA or ECSA size.

Master Terminal Operator Response: After increasing CSA or ECSA storage size, restart IMS.

Module: DBFPVTS0

1500

Explanation: Recovery was attempted for a database. There was an incompatibility between the task I/O table and the scheduler work areas. A ddname was allocated that could not be located in the task I/O table.

System Action: The IMS control region terminates.

Programmer Response: None.

Problem Determination: 4, 35

1501

Explanation: Database recovery was attempted for an unsupported DASD device.

System Action: The IMS control region terminates.

Programmer Response: Ensure that JCL defining the database is correct, and that no user modifications have been made to IMS to attempt to support devices not supported by IMS.

Problem Determination: 4, 8, 35

2017

Explanation: This is an internal error. IRLM processing of a request from a database management system (DBMS) failed. The IRLM issues console message DXR123E DXR017E containing the error ID.

System Action: The IRLM terminates abnormally. An SDUMP of the IRLM address space is requested.

System Programmer Response: Obtain the SDUMP and check the error ID in the message. Contact the IBM Support Center for help in determining the problem.

Problem Determination: The problem is usually a program check within the IRLM code. The dump title includes a module name and an offset into the module where the abend was issued.

2018

Explanation: An unrecoverable error occurred during IRLM initialization. The IRLM issues console message DXR116E containing an error code.

System Action: The IRLM terminates abnormally. An SDUMP of the IRLM address space is requested.

System Programmer Response: Analyze the error code in message DXR116E or DXR008E to determine the reason for this failure. If you are unable to resolve the problem, contact the IBM Support Center.

2019

Explanation: This is an internal error. The IRLM detected either a destroyed storage pool or an invalid request. The IRLM issues message DXR122E to the console.

System Action: The IRLM terminates abnormally. An SDUMP of the IRLM address space is requested.

System Programmer Response: Obtain the SDUMP and contact the IBM Support Center for help in determining the problem.

Problem Determination: The dump title includes a module name and an offset into the module where the abend was issued.

2020

Explanation: The z/OS operator requested an abnormal termination of the IRLM. The IRLM issues message DXR124E to the console.

System Action: The IRLM is terminated abnormally. If the NODUMP parameter was omitted from the command, an SDUMP is requested.

System Programmer Response: The SDUMP shows the status of the IRLM.

2022

Explanation: This is an internal error. IRLM issues this abend because one of its subtasks abended. The IRLM issues message DXR122E to the console.

System Action: The IRLM terminates abnormally. An SDUMP of the IRLM address space is requested.

System Programmer Response: Obtain the SDUMP and contact the IBM Support Center for help in determining the problem.

Problem Determination: The dump title includes a module name and an offset into the module where the abend was issued.

2023

Explanation: The IRLM encountered an out-of-storage condition from either a logic error, a subsystem definition error, or an error from a z/OS service that must be performed for the IRLM to continue processing. The IRLM issues message DXR175E to the console to help identify the error, followed by the message DXR122E, which describes the abend.

System Action: The IRLM terminates abnormally. An SDUMP of the IRLM address space is requested and is issued unless superseded or suppressed.

System Programmer Response: Refer to the DXR175E message to determine which storage was in error and what the probable cause is. If IBM service is required, obtain the SDUMP and contact the IBM Support Center for help in determining the problem.

Problem Determination: The dump title includes a module name and an offset into the module where the abend was issued.

2024

Explanation: This is an internal error. The database management system (DBMS) parameter list is invalid.

System Action: The requesting DBMS is abended with user abend 2024. The IRLM continues processing.

System Programmer Response: Obtain the dump of the requesting DBMS and contact the IBM Support Center for assistance.

2025

Explanation: This is an internal error. An IRLM request to z/OS failed with an unexpected reason code. The IRLM issues message DXR139E to the console with the failing return and reason codes. Message DXR122I is also issued.

System Action: The IRLM terminates abnormally. An SDUMP of the IRLM address space is requested.

System Programmer Response: Obtain the SDUMP

and contact the IBM Support Center for help in determining the problem.

Problem Determination: The dump title includes a module name and an offset into the module where the abend was issued.

2027

Explanation: This is an internal error. The IRLM detected a logical inconsistency in either its processing or the local lock structure. IRLM issues message DXR122E to the console.

System Action: The IRLM terminates abnormally. An SDUMP of the IRLM address space is requested.

System Programmer Response: Obtain the SDUMP and contact the IBM Support Center for help in determining the problem.

Problem Determination: The dump title includes a module name and an offset into the module where the abend was issued.

2031

Explanation: This is an internal error. The IRLM requested that z/OS terminate the IRLM address space because of a previous error. The IRLM issues message DXR122E to the console.

System Action: The IRLM terminates abnormally. An SDUMP of the IRLM address space is requested.

System Programmer Response: Obtain the SDUMP and contact the IBM Support Center for help in determining the problem.

Problem Determination: The dump title includes a module name and an offset into the module where the abend was issued.

2476

Explanation: DBRC abends when I/O to the RECON data set has been prevented. This abend allows CICS emergency restart (takeover) to proceed.

System Action: IMS terminates abnormally.

2478

Explanation: The maximum number of waiting PSTs has been exceeded during program isolation processing.

System Action: The application program abnormally terminates, and a message processing program (MPP) is automatically rescheduled.

Master Terminal Operator Response: If the application program was a batch message processing program (BMP), it must be rescheduled at its last sync point.

Problem Determination: None.

2479

Explanation: The application program had insufficient storage available for a buffer queue element (BQEL).

System Action: The application program abnormally terminates, and a message processing program (MPP) is automatically rescheduled.

Master Terminal Operator Response: If the application program was a batch message processing program (BMP), it must be rescheduled at its last sync point.

Programmer Response: If the problem occurs in batch, increase the region size and rerun the job. If the problem occurs repeatedly in an online environment, specify a larger CSA size or region size, or both, for the IMS control region and restart IMS.

Problem Determination: None.

2480

Explanation: An internal error in the IMS Database Recovery Control was detected. Message DSP0300I was issued with an error code indicating the nature of the error. Refer to message DSP0300I for a description of the individual error codes.

System Action: IMS terminates abnormally.

Programmer Response: Review the error code from message DSP0300I, and if possible correct the problem and rerun the job. Otherwise contact IBM for problem determination assistance.

Problem Determination: 2, 3, 4, 8, 35, and your listings of the RECON data sets.

2481

Explanation: The BLDL macro encountered an error while locating the module required to access the Database Recovery Control.

System Action: Message DFS2481I will precede this abend. Processing terminates abnormally.

Programmer Response: Register 15 contains the return code from the BLDL macro and register 3 contains the BLDL reason code. If the Database Recovery Control has been installed, determine the cause of the locate error, and be aware that the database log or utility information might need to be entered into the RECON data set because it was not accessible.

Problem Determination: 1, 2, 3, 4, 8, 12, 35

2482

Explanation: The DBRC router (DSPCRTR0) has been invoked to perform a function for IMS while a previously invoked functional request is in progress.

DBRC cannot perform multiple concurrent functional requests.

System Action: IMS terminates abnormally.

Programmer Response: Keep all diagnostic information and contact the IBM Support Center for problem determination assistance.

Problem Determination: 2, 3, 4, 8, 11, 35

2483

Explanation: The DBRC loader (DSPLOADR) has been invoked to resolve a call to a DBRC module. The index of the called module in the DBRC router storage shows an undefined module, so the module invocation is invalid.

System Action: IMS terminates abnormally.

Programmer Response: Keep all diagnostic information and contact the IBM Support Center for problem determination assistance.

Problem Determination: 2, 3, 4, 8, 11, 35

2484

Explanation: An IMS Fast Path related control block could not be obtained by using the DFSBCB macro. Register 2 contains the identification of the failing control block.

System Action: The IMS control region terminates.

Programmer Response: Provide more CSA space and emergency restart IMS to resume processing.

Module: DBFICLI0

2485

Explanation: A DMAC exclusive latch hold using the DBFLATCH macro failed because it already exists.

System Action: The IMS control region terminates.

Programmer Response: Because this error condition should not occur, save this dump.

Problem Determination: 11, 35

2486

Explanation: A notify request for internal stop Area or ADS failed because of a severe error in IMS or IRLM and a return code was received from IRLM. For details on the return code, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: IMS terminates abnormally.

Programmer Response: Correct the problem determined by the return code, and restart IMS. If you are unable to correct the problem, contact IBM for further assistance.

Problem Determination: 1, 3, 4, 10, 35

2488

Explanation: A logic error occurred in either IMS or DBRC when DBRC was called to set/reset the DEDB area data set available flag. The code specified in register 15 gives the reason for the abend.

Code (Hex)	Meaning
0C	The return code set by DBRC indicated that the area was not registered in the RECON data set. Because the area data set status call is only issued if the area is registered to DBRC, an internal error occurred.
10	The return code set by DBRC indicated that the area data set was not registered in the RECON data set. Because the area data set status call is only issued when the area data set is registered to DBRC, an internal error occurred in either IMS or DBRC.
2C	The return code set by DBRC indicates that an internal DBRC error occurred during the processing of the area data set status call. Refer to the message issued by DBRC prior to this abend for further explanation. Since the message from DBRC varies according to the situation DBRC encounters, check any DBRC messages issued prior to this abend.
30	The return code set by DBRC indicated that a required parameter was not passed to DBRC.

System Action: IMS terminates abnormally.

Programmer Response: Correct the problem associated with DBRC, and re-execute the job. Refer to the return codes in “DBRC Request Return Codes” on page 392 to determine the cause of the failure.

Problem Determination: 1, 4, 6, 35

2489

Explanation: An asynchronous work element (AWE) enqueue command, issued to the Fast Path common service ITASK routine to stop the DEDB area, failed because of an internal error.

System Action: IMS terminates abnormally.

Programmer Response: Refer to the message explaining the reason for stopping the area issued prior to this abend. Run the Database Recovery utility, DFSURDB0, to recover the area and then rerun the job. If you are unable to determine the problem, proceed

with the problem determination to determine the cause of the failure.

Problem Determination: 1, 4, 6, 35

2496

Explanation: An internal request for a DEDB area lock failed because of a severe error in IMS or IRLM. See *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis* for issuing modules and reasons.

System Action: IMS terminates abnormally.

Programmer Response: Correct the problem determined by the return code, and restart IMS. If you are unable to correct the problem, contact your IBM Support Center for assistance.

Problem Determination: 1, 3, 4, 10, 35

2610

Explanation: This abend is issued by the IMS batch dispatcher (DFSKBDP0) when errors occur in initialization and SCP waits. Register 15 contains the reason code.

System Action: DFSKBDP0 terminates abnormally with a dump.

Programmer Response: See *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis* for more information.

2763

Explanation: The checkpoint selected by module DBFNRST0 to restart the MSDB was not found on the IMS log.

System Action: IMS terminates abnormally.

Programmer Response: Look at the IMS console sheet and identify:

1. The earlier of the latest 2 MSDB checkpoints on MSDBCP1 and MSDBCP2, and
2. A system checkpoint that matches or is before that MSDB checkpoint.

Specify the system checkpoint for the restart.

Problem Determination: 35

2800

Explanation: IMS initialization encountered an error during global online change related initialization. The abend subcode provides the reason for the failure.

0001 The OLCSTAT data set allocate or deallocate failed. Message DFS2848E, which is issued before this abend, displays associated return codes and information related to the failure.

0002 The OLCSTAT data set open, read, write, or close failed. Message DFS2843E, which is issued before this abend, displays associated return codes and information related to the failure.

0003 The OLCSTAT data set access request failed because of an internal error.

0007 The OLCSTAT data set contents are invalid. Message DFS2848E, which is issued before this abend, displays associated return codes and information related to the failure.

0008 The operator replied `CANCEL` to message DFS2845A to cancel IMS initialization after a resource definition inconsistency was detected.

0009 The OLCSTAT data set name defined by this IMS is inconsistent with the OLCSTAT data set name defined by other IMSs in the IMSplex. All of the IMSs in the IMSplex must define the same OLCSTAT data set name.

0010 The OLCSTAT data set is locked because global online change is in progress. IMS is not permitted to initialize while global online change is in progress, A successful INITIATE OLC or TERMINATE OLC command will unlock the OLCSTAT data set.

System Action: IMS initialization terminates abnormally with this abend code.

Programmer Response: For the OLCSTAT data set abend subcodes (0001, 0002, and 0007), correct the OLCSTAT data set error and retry IMS initialization. For abend subcode 0003, save the IMS dump and contact your IBM support center. For abend subcode 0009, define the correct OLCSTAT data set name to this IMS and retry IMS initialization. For abend subcode 0010, the OLCSTAT data set in locked because global online change is in progress. Wait until an INITIATE OLC PHASE (COMMIT) command or TERMINATE OLC command completes successfully and unlocks the OLCSTAT data set before restarting IMS. In the case where all of the IMSs abended during global online change, no IMS is up to process an INITIATE OLC command or a TERMINATE OLC command. In this case, you must run the Global Online Change Utility (DFSUOLCO) with the unlock function to unlock the OLCSTAT data set, before attempting to restart IMS.

Module: DFSIIOC0, DFSCSL40

2801

Explanation: IMS restart encountered an error related to global online change. The abend subcode provides the reason for the failure.

0001 The OLCSTAT data set allocate or deallocate failed. Message DFS2848E, which is issued before this abend, displays associated return codes and information related to the failure.

0002 The OLCSTAT data set open, read, write, or close failed. Message DFS2843E, which is issued before this abend, displays associated return codes and information related to the failure.

0003 The OLCSTAT data set access request failed because of an internal error.

0007 The OLCSTAT data set contents are invalid. Message DFS2844E, which is issued before this abend, displays associated return codes and information related to the failure.

0010 Global online change is in progress. Global online change was initiated since this IMS initialized.

0011 This IMSs modify id at the end of restart is not in sync with the modify id in the OLCSTAT data set.

For a tracking IMS, such as an XRF alternate that is taking over, a DBCTL warm standby that is doing an emergency restart, or an FDR region that is doing fast database recovery, this IMS is not in sync with the OLCSTAT data set. This is probably because a X'70' log record was not successfully logged by the last Global Online Change.

For restarting IMS, Global Online Change may have occurred since this IMS initialized.

0012 The IMS restart command conflicts with the last global online change.

0013 Global Online Change is not supported. Global Online Change is not supported for RSR.

System Action: IMS initialization terminates abnormally with this abend code.

Programmer Response: For the OLCSTAT data set abend subcodes (0001, 0002, and 0007), correct the OLCSTAT data set error and retry IMS initialization. For abend subcode 0003, save the IMS dump and contact your IBM support center. For abend subcode 0010, wait until global online change is finished before retrying IMS initialization. For abend subcode 0011, retry IMS initialization. If an XRF alternate takeover abended or the DBCTL warm standby abended, you should emergency restart the IMS active. For abend subcode 0012, retry IMS initialization and issue an IMS restart command that does not conflict with the last global online change. For abend subcode 0013, define DFSCGxxx OLC=LOCAL and restart IMS.

Module: DFSOLCSO

2990

Explanation: A user-written edit/compression routine has detected a processing error while attempting compression or expansion services.

System Action: The application ends abnormally.

Programmer Response: Ensure the edit/compression routine has been built and linked properly. Examine the problem related data described in *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

Problem Determination: 4, 17a, 17b, 18, 19, and the source/link listings of the edit/compression routine.

2991

Explanation: A user-written edit/compression routine has detected a processing error while attempting compression or expansion services.

System Action: The application ends abnormally.

Programmer Response: Ensure the edit/compression routine has been built and linked properly. Examine the problem related data described in *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

Problem Determination: 4, 17a, 17b, 18, 19, and the source/link listings of the edit/compression routine.

Chapter 5. IMS Abend Codes 3000 - 4095

This section explains user abend codes 3000 - 4095 issued by IMS. Each code is 4 decimal digits.

For a general explanation of user abend codes, see “Introduction to Abend Codes” on page 1. For explanations of user abends 0002 - 2991, see “IMS User Abend Codes 0002 - 2991” on page 39.

3000

Explanation: An error occurred while an XRF alternate system or a Fast Database Recovery region was setting up the proper data set (ACBLIB, FMTLIB, MODBLKS), or while it was processing an online change record. A DFS33xx or DFS34xx message indicating the error accompanies this abend.

System Action: IMS terminates abnormally.

Programmer Response: Correct the condition indicated in the accompanying message. See *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis* for more information.

Problem Determination: 1, 4, 5, 6

3006

Explanation: A directory block was read from the active format data set library which was greater than 256 bytes in length.

System Action: Phase 2 of the MFS Language utility terminates abnormally.

Programmer Response: Locate the block that was read in and determine why the length value is greater than 256.

Problem Determination: 1, 2, 4, 16

3007

Explanation: The MFS Language utility Phase 2 processor has received an unexpected completion code from the host system STOW function. See *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis* for the codes and their meanings.

System Action: The MFS Language utility terminates abnormally.

Programmer Response: Examine the "UTPRINT" output from Phase 2 to determine the failure. See also messages DFS1030I, DFS1031I, DFS1032I, and DFS1012I. Determine the MFS Format library status, and resubmit the job.

Problem Determination: 1, 2, 4, 16

3008

Explanation: Either the MFS Service utility or Phase 2 of the MFS Language utility program received an unexpected return code from the host system function, DEVTYPE or RDJFCB, or the OPEN macro.

At the time of the abnormal termination, register 7 contains a function code indicating the cause of the failure. Register 14 contains the address of the point at which the unexpected return code was encountered. The function codes are as follows:

Code (Hex)	Meaning
04	One of the following error conditions applies to the data set represented by the FORMAT statement: • The DD statement is missing. • The DD statement specifies DUMMY.
08	This indicates an unsuccessful initial opening of one or more of the data sets represented by the DD FORMAT, UTPRINT, or SEQBLKS DD statements.
0C	This indicates an unsuccessful secondary opening of one or more of the data sets represented by the DD FORMAT, or SEQBLKS statements.
10	This indicates an unsuccessful final opening of the data set represented by the DD DEQBLKS statement.
14	This indicates an unsuccessful DEQ or ENQ of the data set requested by the DD FORMAT statements.

Programmer Response: Examine the data set represented by the SYSUDUMP DD statement and the JCL for the phase 2 step to locate SYSTEM IECnnn OPEN ERROR MESSAGES.

Problem Determination: 1, 2, 4, 16

3009

Explanation: The MFS Language utility phase 2 processor has encountered an invalid record or record combination in the data set represented by the SEQBLKS DD statement. This data set is constructed by the Phase 1 processor.

System Action: The MFS Language utility terminates abnormally.

z/OS System Operator Response: Rerun the job,

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allocating the SEQBLKS DD statement to a tape unit.

Programmer Response: None.

Problem Determination: 1, 2, 4, 16, 35

3010

Explanation: An error has been detected during the construction of the ITB tree. The failure could be one of the following:

- Insufficient work storage requirements were calculated
- Invalid hierarchic sequence error in input source

System Action: The MFS Language utility terminates abnormally.

Problem Determination: 1, 2, 4, 16, 35

3011

Explanation: Probable user error. The contents of the MSG ITB in the IMS.REFERAL library are not consistent with the output message indication in the IMS.REFERAL directory entry.

Programmer Response: Perform the following steps:

1. Run the MFS utility with the SCRATCH REFER=msgname control statement.
2. Run the MFS Language utility and reassemble the output MSG. This will place the output MSG ITB into the IMS Referral library and will set output message indication in the directory entry.

Problem Determination: 1, 2, 4, 16, 35

3012

Explanation: Probable user error. The contents of the MSG ITB in the IMS REFERAL library are not consistent with the input message indication in the IMS.REFERAL directory entry.

System Action: IMS terminates abnormally.

Programmer Response: Perform the following steps:

1. Run the MFS utility with the SCRATCH REFER=msgname control statement.
2. Run the MFS Language utility and reassemble the input MSG. This will place the input MSG ITB into the IMS REFERRAL library and will set input message indication in the directory entry.

Problem Determination: 1, 2, 4, 16, 35

3013

Explanation: The LPAGE, DPAGE, or literal order relocation work stacks have overflowed during the processing of an output message LPAGE statement or input message DPAGE statement.

System Action: The MFS Language utility terminates abnormally.

Programmer Response: None.

Problem Determination: 1, 2, 4, 16, 35

3014

Explanation: The number of fields after literal count reduction is less than zero or the MID being constructed will exceed the design size limit of 32748 when the literal pool is attached to it.

System Action: The MFS Language utility terminates abnormally.

Programmer Response: None.

Problem Determination: 1, 2, 4, 16, and 35. The number of fields and literal counts are developed by DFSUTLFO and DFSUTLHO, respectively. The MID is being constructed in subpool 20.

3015

Explanation: The literal work stack has exceeded its maximum size during the processing of an output message MFLD statement.

System Action: The MFS Language utility terminates abnormally.

Programmer Response: None.

Problem Determination: 1, 2, 4, 16, 35

3016

Explanation: An internal logic error has occurred during the sort of a symbol table (PPTSYM or PPTSYM1) into alphabetical order. User modifications might be the cause.

System Action: The MFS Language utility terminates abnormally.

Programmer Response: Ensure that the failure occurs without user modifications to the MFS Language utility.

Problem Determination: 1, 2, 4, 16, 35

3017

Explanation: An internal logic error has occurred during construction of a binary structured tree for the symbol tables.

System Action: The MFS Language utility terminates abnormally.

Programmer Response: None.

Problem Determination: 1, 2, 4, 16, 35

3018

Explanation: An error has been detected during literal reallocation. An incorrect literal offset has been found.

System Action: The MFS Language utility terminates abnormally.

Problem Determination: 1, 2, 4, 16, 35

3019

Explanation: During processing of a DFLD statement, the literal work stack exceeded the maximum size of 32,748 bytes.

System Action: The MFS Language utility terminates abnormally.

Problem Determination: 1, 2, 4, 16, 35

3020

Explanation: The literal work stack has exceeded its maximum size during the processing of a DFLD statement.

System Action: The MFS Language utility terminates abnormally.

Problem Determination: 1, 2, 4, 16, 35

3021

Explanation: Each DPAGE must have at least one literal Field Description Element (FDE) for each internal physical page to be created. If there is no LLLLZZ literal in this stack, an internal logic error has occurred.

U3021 is a standard abend issued from module DFSUT090, the 3270 printer output DFLD Processor.

System Action: The MFS Language utility terminates abnormally.

Problem Determination: 1, 2, 4, 16, 35

3022

Explanation: The FMT or MSG descriptor currently being processed is too large. The resultant online block being constructed in SUBPOOL 20 has exceeded the design limit size of 32,748 bytes.

System Action: The MFS Language utility terminates abnormally.

Programmer Response: The description cannot be processed in its current form. If possible, redefine the descriptor or reconstruct the descriptor as multiple descriptors, and resubmit the job.

Problem Determination: 1, 2, 4, 16

3025

Explanation: An internal logic error has occurred while processing the literal stack for TABLE description. The error might have been caused by user modifications.

System Action: The MFS Language utility terminates abnormally.

Problem Determination: 1, 2, 4, 16, 35

3026

Explanation: An internal logic error has occurred while processing a TABLE symbol table for DFLD table name.

System Action: The MFS Language utility terminates abnormally.

Problem Determination: 1, 2, 4, 16, 35

3027

Explanation: An internal logic error has occurred while processing an IF symbol table for a TABLE description. This error might be caused by user modifications.

System Action: The MFS Language utility terminates abnormally.

Problem Determination: 1, 2, 4, 16, 35

3030

Explanation: The MFS Language utility phase 1 processor has detected an invalid member in the IMS REFERRAL library. This is an internal logic error; user modifications might be the cause.

System Action: The MFS Language utility terminates abnormally. At time of abend, register 3 has the address of member name for which the failure occurred; register 2 has the function code indicating the cause of the failure. The function codes are as follows:

Code (Hex)	Meaning
04	First card not an ESD card.
08	Member-name in ESD card does not match directory member-name.
0C	END card not found.
10	Block size in ESD card does not match directory block size.
14	Requested member-name not found in the directory.

Programmer Response: Ensure that the failure occurs without modifications to the IMS REFERRAL library or the MFS Language utility.

Problem Determination: 1, 2, 3, 4, 8, 12, 16, 35

3040

Explanation: The initialization of an IMS control or batch region failed. The module and associated reason follow.

DFSRRA30
Unable to acquire subpool 231 storage for building a system queue header control block or an external subsystem work area.

DFSRRA70
Unable to acquire subpool 0 storage for building a system queue header control block for a batch region.

DFSRRA70
Unable to acquire subpool 0 for loading the HLPI bootstrap routine for a batch region.

DFSRRA80
Unable to acquire subpool 0 for loading the HLPI bootstrap routine for a batch region.

System Action: IMS terminates abnormally.

Programmer Response: Register 14 at the time of abend contains the address of the location where the error was detected. This register identifies which of the possible conditions caused the abend. Register 15 contains an IMODULE GETMAIN return code indicating the exact cause of the IMODULE failure. For a description of these codes, see “IMODULE Return Codes” on page 571.

Problem Determination: 23, 35. Dumps in CSA

3041

Explanation: An unsupported return code was received from the external subsystem attachment package (ESAP).

System Action: IMS will terminate the TCB representing the external subsystem. The subsystem connections between IMS and the specified subsystem is terminated and processing continues. The master terminal operator will be informed of the failure by receiving message DFS3603I, DFS3606I, or DFS3607I.

System Programmer Response: Refer to the external subsystem documentation to find the information concerning the subsystem failure.

System Operator Response: Notify the system programmer to correct the external subsystem resource.

Problem Determination: 4, 5, 6, 7

3042

Explanation: Module DFSESPR0 issues this abend after detecting error. DFSESPR0 also issues this abend due to errors detected in lower level modules. The module detecting the error sets the abend code for DFSESPR0 to issue.

System Action: The TCB in the dependent region, under which these modules run, is terminated.

Programmer Response: Bytes 1 and 2 of Register 15 contain a hexadecimal value representing the module name that detected the nonzero return code. To determine the module name, refer to the categories describing the various conditions detected by IMS modules in Appendix B, “Return Codes and Function Codes,” on page 557. Bytes 3 and 4 of Register 15 contain the hexadecimal return code passed back by the external subsystem exit or the lower level module.

System Operator Response: Notify the system programmer.

Problem Determination: 4, 5, 6, 7

3043

Explanation: This abend is issued when the external subsystem mother tasks (TCB) end-of-task-exit-routine (ETXR) is scheduled and has passed an invalid daughter task (TCB) address.

System Action: The external subsystem mother task (TCB-(ESSM)) abnormally terminates. This is probably an IMS logic error.

Programmer Response: Use the IMS /START SUBSYS command to restart the mother and daughter external subsystem tasks (that is, subsystem connections).

System Operator Response: Notify the system programmer to correct any unique recovery procedures.

Problem Determination: 1, 2, 4, 5, 6, 7, 8

3044

Explanation: A should-not-occur situation was encountered in communicating with an external subsystem. The dependent region will be abended and must be restarted if application programs will be scheduled in the terminated region.

System Action: The abend will be recognized and handled by IMS during the application termination cleanup processing. As a result, IMS will do the following:

1. Terminate the application program. If this error is detected during sync point processing, terminate the region.
2. Log the relevant data areas.
3. If the transaction is PSTOPPED, send message DFS554A to the master terminal operator and DFS555I to the input terminal.
4. Allow the external subsystem to log relevant information from both the control and the dependent regions.
5. Invoke the external subsystems ECHO exit for determining the disposition of the input message. If the external subsystem does NOT respond to the

ECHO request, IMS will save the input message and PSTOP the transaction. If it DOES respond to the ECHO request, the input message will be re-queued for future processing.

6. Back out all uncommitted changes during application termination.
7. Send message DFS3624I to the master terminal operator.

Programmer Response: Refer to message DFS3624I sent to the master terminal. Message DFS3624I contains the function and return code identifying the problem and the module that detected it.

Options include starting the external subsystem or changing the region error option in the external subsystem PROCLIB member (SSM).

System Operator Response: Check the status of the subsystem connection using the /DISPLAY command. The connection might be terminated. You can start or restart the connection.

Problem Determination: 4, 5, 6, 7

3045

Explanation: This is an IMS pseudoabend caused by a failure in the external subsystem during one of the must-complete phases of connection management. A nonzero return code was passed back by one of the following external subsystem exits indicating a failure condition.

- Sign-on failed in the external subsystem.
- Create thread failed in the external subsystem.
- Terminate thread with the abort option failed in the external subsystem.
- Abort continue failed in the external subsystem.

System Action: The abend will be recognized and handled by IMS during application cleanup processing. IMS will do the following:

1. Terminate the application program. If this error is detected during sync point processing, terminate the region.
2. Log the relevant information from both the control and dependent regions.
3. Discard the input message.
4. STOP the transaction.
5. Back out the database changes done by the application program.
6. Send message DFS555I to the input terminal.
7. Send message DFS554I to the master terminal.
8. Send message DFS3624I to the master terminal.

Programmer Response: Refer to message DFS3624I sent to the master terminal. It contains the function code (FC) identifying the module that detected the error and the return code identifying the error condition. Using the return code, you can now consult the external subsystem manuals for debugging information to determine why the exit encountered the condition which failed.

System Operator Response: The operator should notify the system programmer.

Problem Determination: 1, 4, 5, 6, 7 and 14

3046

Explanation: This is an IMS pseudoabend initiated by IMS during commit processing. It is necessary to abort the application program when a return code of X'04' is received from the external subsystem commit-continue exit or terminate-thread with the commit option. The commit crossover record has been written on the log, and the input messages are processed by the application program. However, application programs connected to the external subsystems are marked with recovery outstanding for the thread; that is, residual recovery elements (RREs) until they are resolved either by resolve-in-doubt processing (part of the normal connection protocol) or by IMS command deleting the RREs (/CHANGE SUBSYS).

System Action: IMS will do the following:

1. Terminate the application program. If this error is detected during sync point processing, terminate the region.
2. Log the appropriate data areas.
3. Send message DFS554A to the master terminal operator.
4. Send message DFS555A to the input terminal.
5. Allow the external subsystems involved with the application program to log their relevant information from the appropriate region (that is, control region or dependent region).
6. Send message DFS3624I to the master terminal. This message will indicate which of the above processes encountered the problem.
7. STOP the transaction.

Programmer Response: Determine the reason why the external subsystem commit process failed. Refer to the external subsystem documentation for help in this process. Restarting the subsystem (/START SUBSYS xxxx) should not destroy any debugging information, because most of the required information is logged or externalized using a diagnostic message.

System Operator Response: Refer to message DFS3624I, which contains the function and return code identifying the problem and the module that detected it.

Problem Determination: 4, 5, 6 and 7

3047

Explanation: This abend is issued because an abend was specified as the region error option in the subsystem definition in IMS PROCLIB. If one of the following situations occurs, the application program abends and the input message is discarded.

- The external subsystem connection cannot be established due to resource constraints, because it was the first request directed to the subsystem.
- The connection to the external subsystem failed either in the external subsystem attachment package (ESAP) or in the external subsystem.
- The external subsystem name specified in the SSN field of the PROCLIB member pointed to by the SSM=parameter contains an invalid subsystem name. Although the PROCLIB member contains the REO option of 'r' (send back a return code), the dependent region terminates with abend U3047 and discards the input message.

System Action: IMS will do the following:

1. Terminate the application program.
2. Back out all uncommitted changes.
3. Stop the transaction.
4. Discard the input message.
5. Send message DFS555I to the IMS master terminal operator and the input terminal.
6. Log the relevant data areas.
7. Allow the external subsystem to log error information from both the control and dependent regions.
8. Send message DFS3624I to the master terminal.
9. Make sure that the subsystem name specified in the PROCLIB member pointed to by the SSM=parameter is a valid DB2 UDB for z/OS subsystem name. Correct the name, if necessary.

Master Terminal Operator: Refer to message DFS3624I which contains the function and return code identifying the problem and the module that detected it.

Options include starting the external subsystem or changing the region error option in the external subsystem PROCLIB member (SSM).

System Operator Response: Start or restart the failing subsystem.

Problem Determination: 4, 5, 6, 7

3048

Explanation: This pseudoabend is issued because the external subsystem indicated that a temporary failure or a temporary resource constraint has occurred.

System Action: IMS will do the following:

1. Terminate the application program.
2. Back out all uncommitted changes.
3. Place the current input message on the IMS suspend queue. The input message is once again released and reprocessed when the failure is recovered or the master terminal operator enters the `/DEQ SUSPEND` command to release the suspend queue.
4. Send message DFS3324I to the master terminal operator to indicate that the input message is being placed on the suspend queue.
5. Send diagnostic message DFS3624I to the master terminal to help determine the cause of the abnormal termination.
6. Send message DFS554A indicating that the program controller task (TCB) has been abnormally terminated.

Programmer Response: Refer to message DFS3624I, which contains the function code identifying the module that detected the error and the return code identifying the cause of the problem.

Options include starting the external subsystem or changing the region error option in the external subsystem PROCLIB member identified by the SSM parameter.

System Operator Response: Notify the system programmer to correct the external subsystem resource allocation problem.

Problem Determination: 4, 5, 6, 7.

3049

Explanation: One of the following conditions has been detected by IMS:

An invalid return code was detected upon return from an external subsystem exit. Either the return code was not within the acceptable range valid for the exit (that is, greater than X'20') or, not having exceeded the range check, the return code was not supported for this exit. Message DFS3608I will also appear if the return code (R15 = FF) in register 15 indicates an exit is missing. The RC = xx value in message DFS3624I is the return code in question; this message will accompany this abend. Register 15 will also contain the function code (FC - module identifier) and return code (RC) value.

Another possibility is that the required data (that is, the parameter list, the exit addresses, or RRE) did not pass validity checking. These conditions can be recognized by the contents of the RC = field. The following list includes these conditions:

R15 = FF
: A required external subsystem exit was not supplied by the external subsystem package, or the address was erroneously zeroed out. Message DFS3608I will also accompany this abend to indicate the exit ID and the region it is associated with.

R15 = FE
The function code passed by the DFSESGO macro, which in turn passed it to module DFSESGL0 IMS system service, was invalid. The caller of DFSESGL0 has a logic error that probably invalidated the function code.

R15 = FD
The count in the parameter list passed to DFSESGL0 indicating the number of parameters contained within the parameter list is invalid. The caller of this system service has a logic error and is invalidating the parameter count (that is, making it negative).

R15 = FC
A subsystem interface block (RRE) was not found when dependent region SIGNON was attempted for the subsystem. This error can occur if there was an abend of the IMS Control Region's ESI TCB for the subsystem, and IMS reconnected to the subsystem following the abend.

System Action: IMS will take the following action:

1. Terminate the application program. If this error is detected during sync point processing or subsystem SIGNON processing, terminate the region.
2. Back out all uncommitted changes.
3. Place the input message being processed at the time back on the IMS input message queue for future reprocessing, provided that the application has not reached a synchronization point. In such a case, the application will logically resume processing after the synchronization point.
4. Send a DFS555I message to the input terminal.
5. Send a DFS554A message to the master terminal.
6. STOP the transaction. If the error is detected during subsystem SIGNON processing the transaction is not stopped.
7. Send message DFS3624I to the master terminal for diagnostic purposes.
8. Send message DFS3608I to the master terminal if R15 = FF (exit missing).

Programmer Response: To quickly determine the cause of the problem, you should first refer to message DFS3624I and examine the RC = xx value. The FC = yy value will indicate the ID of the module detecting the error.

If the RC = xx value does not begin with Fx (that is, 0C), the problem encountered is probably an invalid return code, as described in the first portion of the abend explanation. This is an indication of a possible logic error in the external subsystem exit. Consult the IBM Support Center for aid in problem resolution.

If the RC = xx value **does** begin with Fx (that is, FD), use the following list of acceptable return code installation actions as a guide:

R15 = FF
The external subsystem module table (ESMT) specified for the subsystem member specified by the SSM parameter might not include the required exit. Message DFS3608I will indicate the missing exit ID. If the exit was not included, consult the external subsystem documentation to determine how to include the exit. However if the exit was defined, a logic error in IMS overlaid its address or never inserted its address. Refer to message DFS3608I for additional diagnostic information. Consult the IBM Support Center for assistance in problem resolution. Restart IMS.

R15 = FE
This problem probably stems from an IMS logic error. Consult the IBM Support Center for assistance in problem resolution. Restart IMS.

R15 = FD
An invalid parameter count detected by this system service is probably the result of an IMS logic error. Consult the IBM Support Center for aid in problem resolution. Restart IMS.

R15 = FC
IMS is attempting a dependent region SIGNON to the subsystem without the required RRE. This usually occurs after an abend of the subsystems IMS ESI TCB.

System Operator Response: The operator should notify the system programmer and then take standard recovery/restart actions.

Problem Determination: 1, 4, 5, 6

3050

Explanation: This abend is issued when the module that initializes IMS dispatching blocks detects an error that cannot be corrected.

System Action: The control region terminates abnormally.

System Programmer Response: This abend is caused by a defective IMS code.

The subcode in register 15 at the time of the abend indicates the type of defect.

Subcode (Hex)	Meaning
02,07,18	A possible CSA shortage requires an IPL of the operating system to relieve storage fragmentation.
03,19,1A	A possible private address space storage shortage requires an increase in the region size for the IMS job.

See *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis* for a detailed explanation of the subcodes.

The abend is issued by modules DFSKDP00 and DFSKDS00. The subcodes are internal to IMS and are documented in the module prologues. Follow the procedure for correcting IMS software problems.

System Operator Response: Perform IMS emergency restart.

Problem Determination: 1, 4, 5, 12, 35

3051

Explanation: This is an IMS pseudoabend. IMS has allocated this abend for external subsystems use. The abend is issued when the external subsystem not operational (SNO) exit passes back a X'10' return code. It is returned by the subsystem exit when it requires an IMS abend for debugging purposes, or when the external subsystem is not operational and "Region Error option Q" was selected. It is usually accompanied by a X'55' log record, written to the IMS log and containing additional debugging information.

System Action: IMS will do the following:

1. Terminate the application program.
2. Log the relevant data areas.
3. PSTOP the transaction.
4. Send a DFS554A message to the MTO and a DFS555I message to the input terminal.
5. Allow the external subsystem to log relevant information from both the control and the dependent regions.
6. Requeue the input message for future processing. IMS will *not* invoke the external subsystems ECHO exit to determine the input message disposition. However, the input message will be re-queued for future processing.
7. Back out all uncommitted changes during application termination processing.

Programmer Response: Installation options include:

- The external subsystem documentation should define the reasons for requesting this abend. Determine the nature of the problem from this documentation and correct it.
- Start the external subsystem connection using the `/START SUBSYS` command.

System Operator Response: Start or restart the failing subsystem connection.

Problem Determination: 4, 5, 6 and 7

3052

Explanation: This IMS abend is issued when an internal required function did not complete successfully. One of the following occurred:

- An invalid function code was passed to the external subsystem synchronization point manager (DFSFESP0) during an application synchronization point.
- The 1-byte code is passed by the IMS synchronization point manager, DFSFXC30, in PST field PSTSYNFC.

System Action:

1. Terminate the application program. If this error is detected during sync point processing, terminate the region.
2. Log the relevant information from both the control and dependent regions.
3. Discard the input message.
4. STOP the transaction.
5. Back out the database changes done by the application program.
6. Send message DFS555I to the input terminal.
7. Send message DFS554A to the master terminal.
8. Send message DFS3624I to the master terminal.

Programmer Response: Refer to message DFS3624I that is sent to the master terminal that contains the function (FC) and return code (RC) identifying the module that detected the error and the error condition (return code), respectively. With the return code, see Appendix B, "Return Codes and Function Codes," on page 557. An invalid function code could denote a logic error.

System Operator Response: Notify the system programmer, then perform the prescribed recovery/restart actions.

Problem Determination: 1, 2, 3, 4, 5, 6, 7

3053

Explanation: This is an IMS pseudoabend issued when either the external subsystem sign-on or commit prepare exit passes back return code X'18' in register 15. This is an indication that the recovery token (NID) associated with the application program already exists in the external subsystem. This condition is most likely to occur when IMS is repeatedly cold started after abnormal terminations while an active external subsystem connection exists.

For more information, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: IMS will take the following action:

1. Terminate the application program. If this error is detected during sync point processing, terminate the region.
2. Back out all uncommitted changes.
3. Place the input message being processed at the time back on the IMS input message queue for immediate rescheduling and reprocessing. The act

of rescheduling will increase the origin application sequence number (OASN) portion of the NID, thereby making it unique.

4. Send a DFS555 message to the input terminal when the application was scheduled into a BMP.

The transaction/program will NOT be PSTOPPED.

Programmer Response: None required. The transaction will be immediately reprocessed without installation/operator intervention. However, if this abend recurs each time the external subsystem connection is established (that is, after /START SUBSYS command), the installation should consult the external subsystem application program documentation to determine the mechanism for manually deleting the recovery tokens in question.

3054

Explanation: This is an IMS abend, issued by either DFSESI40 or DFSESPL0 when an error is detected while attempting to release resources (that is, storage work areas). Register 15 contains the return code passed back by the IMODULE service and a hexadecimal value representing the module that detected the nonzero return code (see below for register 15 content). Register 14 contains the address of the module that detected the nonzero return code.

System Action: IMS will terminate the TCB representing the external subsystem and prevent a connection between itself (IMS) and the specified external subsystem from being established. If the 3054 occurs during IMS initialization processing, all other IMS tasks (TCBs) will be permitted to continue their initialization processing. If it occurs as a result of the /START SUBSYS command, only the external subsystem task is terminated abnormally and other IMS processing will continue.

Programmer Response: For an explanation of the IMODULE DELETE return codes, see “IMODULE Return Codes” on page 571.

Use the address in register 14 to determine which module issued the abend and the reason the IMODULE DELETE failed.

For information about the problem-related data in register 15, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

Use the IMS /START command to restart the failing external subsystem.

System Operator Response: Notify the system programmer, then perform the prescribed installation recovery/restart actions.

Problem Determination: 4, 5, 6, and 7

3055

Explanation: The external subsystem (DB2 UDB for z/OS) was unable to complete a phase 1 commit request, and passed back return code 4.

System Action: The dependent region terminates with abend U3055.

Programmer Response: Check the DB2 UDB for z/OS subsystem for abends or messages, or both, that indicate why DB2 UDB for z/OS is unable to process the phase 1 commit request.

3057

Explanation: This abend occurs when an application program attempts to connect to an external subsystem and a connection is not established. One of the following conditions can be the cause of the abend:

- The SSM execute parameter was not specified for the control region defining the external subsystem to IMS.
- The dependent region SSM execute parameter did not include the definition for the external subsystem.
- A batch application program issued an SQL call to a DB2 UDB for z/OS external subsystem and a connection had not been established between IMS and the DB2 UDB for z/OS subsystem. In this case, the responsibility for establishing the connection lies with DB2 UDB for z/OS. See the DB2 UDB for z/OS manuals on how to establish a connection between IMS and DB2 UDB for z/OS in a batch environment.

System Action: Application program initiated, external subsystem calls are directed to the external subsystem Program Request Handler (DFSESPR0). Since a connection was not established with the external subsystem, the call could not be processed. The call was intercepted so that the application program could be terminated. IMS will initiate the following action depending on whether the application program is running in an online or batch environment:

1. Terminate the application program.
2. Back out all uncommitted changes.
3. Place the input message being processed at the time on the IMS input message queue for reprocessing.
4. Send a DFS555 message to the inputting terminal.
5. The transaction will be PSTOPPED to prevent it from being rescheduled.

Programmer Response: Determine the reason for the connection failure and make the necessary corrections. If the application program is running in a batch environment, rerun the batch application. If the application program is running in an online environment, restart the dependent region application.

System Operator Response: Notify the system programmer.

Problem Determination: 4, 5, 6, 7.

3058

Explanation: The BCB storage manager detected a failure. Refer to *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis* for further explanation and for the abend subcodes.

System Action: IMS terminates abnormally, depending on whether the abend is issued in the control region and whether the TCB which took the abend is re-attachable.

Programmer Response: If IMS terminates, perform appropriate restart procedures.

Problem Determination: 4, 5, 6, 7

3059

Explanation: The BCB storage manager was entered to obtain an IPAGE of storage and invoked the IPAGE formatter. On return from the formatter, the number of blocks on the IPAGE was zero.

System Action: IMS terminates abnormally.

Programmer Response: Refer to *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis* to determine the cause of the problem.

Problem Determination: 4, 5, 6, 7

3090

Explanation: A logic error was detected during Fast Path database tracker initialization. Reason codes further identify the type of error:

Reason Code	Description
01	An error return code was returned from IMODULE GETMAIN macro while attempting to get storage for EDBT. The return code from R15 has been saved in R2. Module: DBFDT100
02	An error return code was returned from IMODULE LOAD macro while attempting to load RSR FP related module DBFDTL. The return code from R15 has been saved in R2. Module: DBFDT100
03	An error return code was returned from MVS SETLOCK request. The return code from R15 has been saved in R2. Module: DBFDT100
04	An error return code was returned from MVS TCBTOKEN request. The return code from R15 has been saved in R2. Module: DBFDT100
05	An error return code was returned from DSPSERV macro, while attempting to create a data space. The return code from R15 has been saved in R2. Module: DBFDT100
06	An error return code was returned from ALESERV macro, while attempting to create a data space. The return code from R15 has been saved in R2. Module: DBFDT100
07	An error return code was returned from IMODULE LOAD macro while attempting to load data space management module DFSDSM0L. The return code from R15 has been saved in R2. Module: DBFDT100
08	An error occurred while getting the address of ESCD. Module: DBFDT110
09	An error return code was returned from DFSCWU macro while attempting to create an ITASK (FPQS ITASK) for FP DB tracker. The return code from R15 has been saved in R2. Module: DBFDT110
0A	An error return code was returned from DFSCWU macro while attempting to create an ITASK (FPTI ITASK) for FP DB tracker. The return code from R15 has been saved in R2. Module: DBFDT110
0B	An error return code was returned from IMODULE macro while attempting to get storage for FP DB tracker's control block (IOTI). The return code from R15 has been saved in R2. Module: DBFDT110
0C	An error return code was returned from DFSCWU macro while attempting to create an ITASK (IOTI ITASK) for FP DB tracker. The return code from R15 has been saved in R2. Module: DBFDT110

0D An error return code was returned from DFSBCB macro while attempting to get storage for SRB (SRB-A). The return code from R15 has been saved in R2.

Module: DBFDT110

0E An error return code was returned from DFSBCB macro while attempting to get storage for SRB (SRB-B). The return code from R15 has been saved in R2.

Module: DBFDT110

0F An error return code was returned from IMODULE macro while attempting to get storage for EMAC hash table. The return code from R15 has been saved in R2.

Module: DBFDT150

10 An error return code was returned from DFSBCB macro while attempting to get storage for AWE. The return code from R15 has been saved in R2.

Module: DBFDT150

11 An error return code was returned from IMODULE macro while attempting to get storage for TUR hash table. The return code from R15 has been saved in R2.

Module: DBFDT150

12 An error return code was returned from IMODULE macro while attempting to get storage for OFR_TUR hash table. The return code from R15 has been saved in R2.

Module: DBFDT150

13 An error return code was returned from DFSCWU macro while attempting to create ITASK (LRQS ITASK). The return code from R15 has been saved in R2.

Module: DBFDT100

14 An error return code was returned from IMODULE macro while attempting to get storage for DB buffer header. The return code from R15 has been saved in R2.

Module: DBFDT110

15 An error return code was returned from IMODULE macro while attempting to get storage for DB buffer. The return code from R15 has been saved in R2.

Module: DBFDT150

16 An error return code was returned from IMSAUTH macro while attempting to page fix DB buffer. The return code from R15 has been saved in R2.

Module: DBFDT150

24 The Fast Path tracker is unable to load DFSLRIQS from the libraries specified in the JOBLIB and STEPLIB DD cards. Examine the libraries and make sure DFSLRIQS exists in one of them. If it does, report this problem to IBM. If not, determine why the module was not installed with the rest of IMS. If it was installed, determine why it was removed from the library.

3091

Explanation: A logic error was detected during Fast Path database tracking running under Log Router TCB. Reason codes further identify the type of error:

Reason Code	Description
01	An invalid request code was detected by FP database tracking AWE queue server. Module: DBFDT250
03	During restart of OFR, AREA control block could not be found for the AREA that was OFR-in-progress when IMS terminated. Module: DBFDT270
04	An error return code was returned from IMODULE GETSTOR, indicating that storage for an AWE could not be obtained in CSA. The return code from IMODULE has been saved in R2. Module: DBFDT250, DBFDT260
05	An invalid type of FP database redo record was encountered during tracking redo-queue processing. Module: DBFDT250

System Action: IMS terminates abnormally with a dump.

System Programmer Response: Contact IBM.

3093

Explanation: A logic error was detected during FP database tracking running under FP TCB. Reason codes further identify the type of error:

Reason Code	Description
01	An error return code was returned from DFSBCB GET, indicating that AWE could not be created. The return code from DFSBCB has been saved in R2. Module: DBFDT300
02	An error return code was returned from DFSBCB GET indicating that AWE could not be created when attempting to create DBRC request area. The return code from DFSBCB has been saved in R2. Module: DBFDT300
03	An invalid request code was detected by FP database tracking AWE queue server. Module: DBFDT300
04	An invalid type of AWE was detected by FP database tracking AWE queue server. The storage of the AWE cannot be released. Module: DBFDT300
05	A nonzero return code was returned by DBRC stream complete notification macro. See message DFS2966A. Module: DBFDT300

System Action: IMS terminates abnormally with a dump.

System Programmer Response: Contact IBM.

3094

Explanation: A logic error was detected during Fast Path database tracking. Reason codes further identify the type of error:

Reason Code	Description
01	An invalid function code was detected by FP database status change processing. Module: DBFDT180
02	An error return code was returned from DFSBCB GET indicating that AWE could not be created by FP database status change processing. The return code from DFSBCB has been saved in R2. Module: DBFDT180
03	A nonzero return code was returned by DBRC early end tracking macro. See message DFS2969A. Module: DBFDT180

System Action: IMS terminates abnormally with a dump.

System Programmer Response: Contact IBM.

3100

Explanation: An internal error was detected in the structure of the parse table. U3100 is a standard abend issued by the MFS Preprocessor Parse Analysis Routine, DFSUPAM0.

It is possible that the MFSGBL area of the parse table of the calling module or parse stack entry was destroyed.

System Action: The MFS preprocessor terminates abnormally.

Problem Determination: 1, 2, 8, 11, 12, 16, 35

3101

Explanation: An internal logic error has occurred while trying to analyze a source statement.

System Action: The MFS preprocessor terminates abnormally.

Programmer Response: After performing problem determination, examine the source statement causing the failure, correct the errors or reorder the operands, and resubmit the job.

Problem Determination: 1, 11

3102

Explanation: An internal logic error has occurred while attempting to create or write an ITB to IMS.REFERAL.

System Action: The MFS preprocessor terminates abnormally.

Problem Determination: 1, 2, 8, 11, 16, 35

3103

Explanation: An internal logic error has occurred while trying to classify the character currently being processed.

System Action: The MFS preprocessor terminates abnormally.

Programmer Response: After performing problem determination, examine the source statement causing the failure, correct the error, and resubmit the job.

Problem Determination: 1, 2, 8, 11, 16, 35

3104

Explanation: An internal logic error has occurred while the MFS preprocessor was processing a delimiter. The ITEM area within MFSGBL overflowed.

System Action: The MFS preprocessor terminates abnormally.

Programmer Response: Examine the source statement causing the failure, correct the error, and resubmit the job.

Problem Determination: 1, 2, 8, 11, 16, 35

3105

Explanation: An internal logic error has occurred while processing a continuation character.

System Action: The MFS preprocessor terminates abnormally.

Programmer Response: After performing problem determination, examine the source statement causing the failure, correct the error, and resubmit the job.

Problem Determination: 1, 2, 8, 11, 16, 35

3107

Explanation: An internal logic error has occurred while attempting to create or write an ITB to IMS.REFERAL.

System Action: The MFS preprocessor terminates abnormally.

Problem Determination: 1, 2, 8, 11, 16, 35

3108

Explanation: An internal logic error has occurred while attempting to create or write an ITB to IMS.REFERAL.

System Action: The MFS preprocessor terminates abnormally.

Problem Determination: 1, 2, 8, 11, 16, 35

3109

Explanation: An internal logic error has occurred while attempting to create or write an ITB to IMS.REFERAL.

System Action: The MFS preprocessor terminates abnormally.

Problem Determination: 1, 2, 8, 11, 16, 35

3110

Explanation: An internal logic error has occurred while attempting to create or write an ITB to IMS.REFERAL.

System Action: IMS terminates abnormally.

Problem Determination: 1, 11

3111

Explanation: The MFS Language utility preprocessor tried to analyze a source statement and an internal logic error occurred in the preprocessor. Register 6 contains the function code showing the statement processor that took the abend. Register 15 contains the invalid value that caused the abend. For a description of the function codes, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: The MFS preprocessor terminates abnormally.

Problem Determination: 1, 2, 8, 11, 16, 35

3115

Explanation: An internal logic error occurred during the stacking or unstacking of records for the MFS preprocessor source input.

System Action: The MFS preprocessor terminates abnormally. Register 10 contains the address of the point at which the abend was initiated.

Problem Determination: 1, 2, 8, 11, 16, 35

3116

Explanation: An internal logic error occurred in a general sort routine used by the MFS preprocessor.

System Action: The MFS preprocessor terminates abnormally.

Problem Determination: 1, 2, 8, 11, 16, 35

3120

Explanation: During IMS restart, module DFSCMR00 is needed to reinstate the MSC control blocks, but is not available.

System Action: The ABEND was preceded by an IMS DFS3120I message.

Programmer Response: Make sure that DFSCMR00 is linked into DFSRST00 load module.

3141

Explanation: An error was detected while an XRF alternate system or a Fast Database Recovery region was reading the log data set during emergency restart. Some possible causes are:

- An I/O error occurred on the restart data set (RDS).
- XRF specifications cannot be changed in this restart. See message DFS3851I.
- The other system is not the active system. See message DFS3852I.

- The IMSID name does not match the checkpoint recoverable service element (RSE) name. See message DFS3868I.
- The HSBID for the XRF primary and active systems cannot be equal. See message DFS3894I.
- An attempt was made either to start a DB/DC system with a Database Control (DBCTL) log or to start a DBCTL system with a DB/DC log.

System Action: IMS terminates abnormally with abend U3141.

Master Terminal Operator Response: After reloading, restart IMS using the /ERE command. If an I/O error occurred, a restart from an archived log might be necessary.

Problem Determination: 1, 2, 3, 4, 6, 35

3265

Explanation: The Log Recovery utility encountered an error while accessing WADS. See *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis* for the codes and their meanings.

System Action: The Log Recovery utility terminates abnormally.

Problem Determination: 1, 2, 3, 5, 8, 11, 17a, 17g, 35

3271

Explanation: The Log Recovery utility could not correctly close (terminate) the OLDS. Refer to the explanation of message DFS3271I for additional detail.

System Action: Log Recovery utility terminates abnormally.

Problem Determination: 1, 2, 3, 5, 8, 11, 17a, 17g, 35

3272

Explanation: An internal processing error occurred in the Log Recovery utility. Message DFS3272E accompanies this abend.

System Action: The Log Recovery utility terminates processing.

Programmer Response: Contact the IBM Support Center for assistance.

3274

Explanation: The Log Archive utility or Recovery utility received an error return code from a DBRC exit. See *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis* for the codes and their meanings. Message DFS3274I is issued when this error occurs and shows the type of DBRC exit that failed and the DBRC return code. The type of DBRC exit invoked is indicated by one of the following values:

```
ARCHIVE INIT
ARCHIVE COMPLETE
RECOVERY INIT
RECOVERY OPEN
RECOVERY EOV
RECOVERY CLOSE
```

See “DBRC Request Return Codes” on page 392 for an explanation of any DBRC return codes received.

An additional error message might be issued to SYSPRINT by the DBRC exit.

System Action: The utility terminates abnormally.

Problem Determination: 1, 2, 3, 8, 11, 35

3275

Explanation: A logic error occurred in either IMS or DBRC. In all but two cases, message DFS030I accompanies the abend and contains a reason code describing the failure. For the other two cases, message DFS030I is not issued, but the two low-order bytes of register 15 contain a reason code in character format. These are:

Code	Meaning
03	A return code 12 was received from DBRC during the database authorization process. The condition should not have occurred unless there was an error in the subsystem initialization or in DBRC. Message DFS030I will also be issued and will contain reason code 3 when the abend is issued.
04	The DEDB area is not registered with DBRC, but the lock scope is global. This implies data sharing, which requires DBRC registration.
11	An ADSC control block for the DEDB area did not have a corresponding entry in the ADS list returned by DBRC.
14	DBRC detected an inconsistency for one of the following situations: • Within the RECONs. • Between the RECONs and IMS. **Within the RECONs** The database or subsystem record indicates tat the subsystem has not been authorized to the database. This situation should not occur. If the database is authorized to a subsystem, then both the database and subsystem records must indicate this condition. **Between the RECONs and IMS** IMS indicates that the database is authorized, but the RECONs indicate

that the database is not authorized. This situation can occur if external commands, separate from IMS commands, are used t modify the RECONs.

The logic error might be caused by the invalid use of the DELETE.SUBSYS or CHANGE.SUBSYS commands; if this occurs, register 15 might contain one of the reason codes associated with message DFS030I.

System Action: The IMS control region terminates abnormally.

Programmer Response: This is an internal IMS system error. Contact the IBM Support Center for help in determining the problem.

Problem Determination: 1, 4, 10, 35

3276

Explanation: While performing I/O processing, Fast Path detected the inflight I/O count (DMACWTCT) to be invalid. The inflight I/O count is already zero or negative prior to the decrement.

System Action: IMS issues the abend, produces a dump, and terminates abnormally.

System Operator Response: Emergency restart IMS to resume processing.

Problem Determination: 1, 2, 3, 4, 6, 35

3287

Explanation: The application program was terminated by the DL/I call analyzer because one of the databases referenced by the application program was stopped by a global command or had an I/O error.

System Action: The application program terminates abnormally.

Programmer Response: Contact the master terminal operator or system programmer to recover the database, and re-execute the job.

Problem Determination: 1, 4, 11

3289

Explanation: The command lock request failed. An attempt was made to notify other subsystems of the database backout failure. A message listing the database names that had backout failures is sent to all other sharing subsystems. Prior to sending the message, the command lock is acquired to serialize the commands across the subsystems.

System Action: IMS terminates abnormally.

Programmer Response: Check the IRLM LOCK request and other IRLM sharing subsystem failures. See “IRLM Request Return and Reason Codes” on page 446 to determine the cause of the failure.

Problem Determination: 1, 4, 10, 35

3290

Explanation: During sync point processing, the lock request handler was called to release all locks held by the application program. The request to release these locks failed.

System Action: IMS terminates abnormally.

Programmer Response: Correct the problem determined by the UNLOCK request return code. Refer to “UNLOCK Request” on page 449 to determine the cause of the failure.

Problem Determination: 1, 4, 10, 35

3300

Explanation: This abend can occur for any application when a lock request to the IRLM fails because of an internal IRLM problem or when the IRLM experiences an out-of-storage condition. It is also issued for batch applications (DLI or DBB region type) when the IRLM terminates abnormally. See *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis* for the codes and their meanings.

System Action: The application program terminates abnormally.

Programmer Response: If the IRLM terminates abnormally, database backout should be run and the job restarted after the IRLM is reinitialized.

If this abend is caused by an abnormal termination other than IRLM, the IMS lock trace table will contain the return and reason codes from the IRLM on the lock request. See “LOCK Request” on page 448 to determine the cause of the failure.

Problem Determination: 1, 17, 34

3301

Explanation: This pseudoabend is issued when the number of locks acquired on behalf of the application program has exceeded the maximum specified by the installation or application programmer. The maximum number of locks an application program can accumulate before committing is specified by the PSBGEN LOCKMAX= parameter or the LOCKMAX= override parameter in the DL/I or DBB batch, or dependent region JCL.

System Action: The application program abends with user abend 3301.

Programmer Response: You can override the PSBGEN LOCKMAX= specification at execution time by specifying the LOCKMAX= parameter in the batch or dependent region JCL. An override parameter of

LOCKMAX=0 will turn off all locking limitations. The LOCKMAX value for the PSBGEN and override cases is in units of 1000. Each time the LOCKMAX value is increased by 10, the application is allowed to acquire 10,000 more locks.

Each application program is allowed to have its own limit on the maximum number of locks it can acquire, that is each application program can be individually constrained to a specific amount of virtual storage resources to be used for locking.

An errant application program that is not constrained can consume all locking storage and cause significant disruption to other application programs using the same locking services.

3302

Explanation: The LOCK request handler received an unexpected return code from the IRLM or from the program isolation (PI) lock manager if the IRLM is not being used. This indicates an internal IMS error.

System Action: The application program terminates abnormally.

Programmer Response: None.

Problem Determination: 1, 17, 30, 34

3303

Explanation: One of the following conditions occurred:

- A lock request to the IRLM failed because of a conflict with the retained lock for a failed subsystem. Message DFS3304I is issued in conjunction with this abend.
- The IRLM has entered IRLM FAILED or COMM FAILED state. In order to ensure database integrity before allowing the IRLM to enter the INITIAL state, it was necessary for IMS to terminate the application.

  IRLM could also have failed if some or all databases could not be authorized or verified in batch mode.
- An IMS system terminated all applications when the IRLM terminated abnormally.
- The application program tried to use a database that was not available for access or update, or both. Message DFS3303I is issued in conjunction with this condition.
- A “read any” request was rejected because an I/O Toleration extended error queue element (EEQE) exists for the control interval (CI) specified in message DFS2524I. For this condition, message DFS2524I is issued in conjunction with abend U3303.
- A /START, /STOP, or /DBRECOVERY database command was issued against a full-function database referenced by a Fast Path application.
- A DB/2 subsystem, that was connected to IMS, is shutting down and IFPs are waiting in the BALG with access to the DB/2 resource. IMS handles this situation in the same manner as it would if a /DBR command were issued.

  Module DFSCST00 calls module DBFDBAC1 to for IFP rescheduling. Module DBFDBAC1 sets field EPSTCDIE, and module DBFHGU10 set field PSTABTRM.
- A PI lock request rejected attempting to get a retained lock.
- A ROLS call was issued:
  - For a DB PCB which received one of the data-unavailable status codes
  - For an I/O PCB without an I/O area or token in the call
  - By an application program that received incorrect input data
- A coupling facility connection failure or structure failure occurred during a read-and-register operation to the coupling facility.
- A recoverable indoubt structure (RIS) was established in a CCTL-IMS connection. Message DFS0693I displays the PSB and the recovery token.
- Processing of a DL/I call for a HALDB request failed as a result of an unavailable partition.

System Action: The application program terminates abnormally. The message being processed is placed on the SUSPEND QUEUE unless the SERIAL=YES option was specified on the TRANSACT macro or was involved in a protected conversation with RRS/MVS. For SERIAL=YES, the message is put back on the queue as the next message to be processed for this transaction, and the transaction is stopped. For the protected conversation, IMS discards the input message but does not stop the transaction.

Programmer Response: For cases 1, 4 and 6 in the explanation, you might choose to receive status codes instead of abend U3303 by issuing the INIT call. For a description of the INIT call, see *IMS Version 9: Application Programming: Design Guide*. For formats and parameters for the INIT call, see *IMS Version 9: Application Programming: Database Manager*. If the abend is caused by an application program that issued a ROLS call, determine the cause of the ROLS and correct, if necessary.

System Operator Response: If the abend is a result of a conflict with the retained locks for a failed subsystem, you must run the database backout or emergency restart for that failed subsystem. The database backout or emergency restart automatically notifies this IMS to release the transactions on the suspend queue. The DFS3304I message that precedes abend 3303 identifies the failed IMS.

| If the abend is a result of an IRLM FAILED or COMM
| FAILED, the IRLM can be restarted or the
| communication between the IRLM reestablished, or
| both. The databases can be restarted using the /START

command and the suspended transactions released using the /DEQ SUSPEND command. Any BMPs might also need to be restarted.

Note: For IRLM, PSTCSHAB indicates an IRLM problem and is set to the value ON in module DFSSDLB0 or DBFNOTM0, and is detected in modules DBFHGU10, DBFIRC10, DBFLMGR0 and DBFPCC30 where the value of field PSTABTRM is set.

If the abend is a result of the an IRLM abending, the IRLM can be restarted and the MVS MODIFY command used to specify RECONNECT to IMS. The databases can be restarted using the /START command. Any BMPs might also need to be restarted.

If the abend is a result of an attempt to access an unavailable database, message DFS3303I indicates the reason the database was unavailable.

If the abend is the result of finding an I/O Toleration EEQE, the database can be unlocked using the /UNLOCK command on the alternate system. This purges the EEQEs. The suspended transactions can be released using the /DEQ SUSPEND command on the data sharing system. Any BMPs might also need to be restarted.

If the abend is the result of an attempt to get a retain lock, an indoubt CICS thread holds a lock. To prevent a system from being stopped until the thread is resolved, all lock requests for this resource will be rejected. Flag PRMRJECT is set on in module DFSFXC10, and is detected in module DBFLRH00 where field PSTABTRM is set.

If the abend is the result of a command that was issued against a full-function database, the abend U3303 forces a reschedule, so that the status change of the full-function database can be picked up.

If the abend is the result of a RIS problem, issue the /DIS CCTL command to find the indoubt thread. Then issue the /CHA CCTL command to remove the RIS.

Problem Determination: 1, 17

3304

Explanation: This abend is issued when a database read error occurs and data has been modified on this call. This prevents potential database integrity problems.

System Action: The application program terminates abnormally. IMS processing continues.

Programmer Response: Message DFS2571I or DFS3712A, displayed on the master terminal, gives details about the read error. Before rerunning the application, it might be necessary to perform database recovery for the DEDB area specified.

3305

Explanation: One of the following conditions occurred:

- IRLM drove the IMS status exit after being informed that the active IMS system was being taken over by the alternate system.
- IRLM drove the IMS status exit informing IMS that the IRLM terminated abnormally while the alternate IMS system was either in tracking mode or in takeover processing, but before takeover completed.
- IRLM drove the IMS status exit in a Fast Database Recovery region.

System Action: IMS terminates abnormally.

Programmer Response: Take the appropriate action to regain XRF capability:

- For the first condition, bring up the former active IMS system as the alternate after IMS terminates.
- For the second condition, bring up the IRLM and restart the alternate IMS system.
- For the third condition, restart the Fast Database Recovery region after connectivity is re-established to the IRLM lock structure.

3306

Explanation: This abend is issued to prevent non-APF authorized programs from gaining PSW (program status word) supervisor state, which violates z/OS integrity. The IRPM pointer is invalid. The key 8 IRPM does not point to its paired key 7 IRPM. The paired key 7/key 8 IRPMs are formatted during SVC initialization to point to each other.

This abend can occur when faulty programs cause storage overlays, though there are attempts to use IMSs PC number. The PSTIRLMA pointer in the PST pointing to IRLM RLPL storage within the IRPM block is overlaid, or the key 8 IRPM storage itself is overlaid.

System Action: IMS terminates abnormally.

Programmer Response: Check for an overlaid IRPM block or an application that is unauthorized to use IMSs PC number.

Problem Determination: 1, 4, 6, 13

3307

Explanation: This abend will occur for an application when an IRLM out-of-storage condition occurs in the lock table during coupling facility use.

System Action: The application program terminates abnormally.

Programmer Response: Consider increasing the size of the lock table in the coupling facility.

Problem Determination: 1, 17, 30, 34

3308

Explanation: This abend is the result of a CSL request error.

System Action: IMS terminates abnormally.

Programmer Response: Message DFS3308E is issued prior to this abend. Refer to this message to determine the reason for the abend.

3310

Explanation: This abend is the result of a lock request being timed out by IRLM, when LOCKTIME is specified in either a DFSVSMxx proclib member or DFSVSAMP DD.

System Action: The dependent region terminates abnormally.

Programmer Response: Investigate why the lock request was timed out. RMF™ record 79.15 indicates what task was blocking this request from being granted. RMF can also be used online to format the IRLM LONG LOCK information. Refer to "Designing the IMS System" section in *IMS Version 9: Installation Volume 2: System Definition and Tailoring* for information on how this parameter is set.

3312

Explanation: An error occurred during DBRC processing for an internal system error. Register 15 contains the code identifying this error, which is described in *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: Processing terminates abnormally.

System Programmer Response: Take appropriate action based on the return code.

Problem Determination: 1, 2, 3, 4, 8, 12

3313

Explanation: An IMS utility program encountered a severe error requiring analysis by an IBM Support Center representative. A return code is placed in register 15. The return codes have the following meanings:

Code (Hex)	Meaning
00	The Log Merge utility (DFSLTMG0) encountered a deadlock situation.
04	The Log Merge utility (DFSLTMG0) failed to reach EOF on one or more of its input files.

System Action: The job is terminated with a dump.

Programmer Response: Rerun the job with a SYSUDUMP DD statement. Retain all input and output data sets. Contact your IBM Support Center for assistance.

3314

Explanation: An unrecoverable error was detected by DFSPCC40 during processing because:

- Changed data exit routines or changed data logging were defined for the database.
- The changed data exit routine returned an abend return code.

The reason code for the abend on the z/OS message and in register 15 contains the following reasons:

1st Byte:
Identifies the module that detected the error.

04 DFSPCC40.

2nd Byte:
Identifies the routine that detected the error.

00 Setup.

04 CAPD chain loop.

08 CAPD routine.

12 Build XPCB control blocks.

16 Build XSDB control blocks.

20 Invoke user exit.

24 Restore exit interface and clear exit storage.

28 Load exit.

32 Get storage.

36 Free storage.

40 Delete exit.

44 Send message.

3rd Byte:
Contains the return code.

Code	Meaning
04	The user exit defined for the segment was not found. Message CSVOO3I contains the load module name.
08	Storage obtain or release error
12	Exit LOAD error.
16	Exit DELETE error.
20	Exit return code requests an abend.
24	Invalid return code from the exit routine. The return code is less than or equal to 20 or is not a multiple of 4.

4th Byte:

Contains the reason code, which is based on the return code in Byte 3.

Return Code	Reason Code
04	00—No additional qualification.
08	The low byte of the return code was passed back by MVS GETMAIN or FREEMAIN (see MVS GETMAIN/FREEMAIN return codes).
12	00—No additional qualification.
16	The return code returned was passed back by z/OS on a module request DELETE (see MVS DELETE return codes).
20	Any value. Value is user defined by user exit.
24	Any value that is not a multiple of 4 or greater than 20.

System Action: The application program terminates abnormally.

Problem Determination: For return code 4, EXIT NOT FOUND, ensure that the exit load module is available. For return code 20 or exit return code 24, see the exit routine listing.

Also see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis* for detailed diagnostic information.

3325

Explanation: The Hardware Data Compression exit routine detected an error while attempting to perform compression or expansion services.

System Action: IMS terminates abnormally.

System Programmer Response: Register 14 contains the reason code for the error. For an explanation of the reason code and an analysis of the error, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

3398

Explanation: This abend code only appears in the DFS554 message for Database Control (DBCTL) threads. It means that the thread was actively scheduled and then collapsed because the interface between DBCTL and the Coordinator Control (CCTL) subsystem terminated.

System Action: No action results specifically from this abend.

Programmer Response: The transaction did not complete. All changes were backed out. You can rerun the transaction after the DBCTL-CCTL connection is established again.

3399

Explanation: Each time DBRC allocates an RSR-covered, shareable DEDB area or FF database, the counter SDCRSR_CVCNT increases by 1. Each time DBRC deallocates an RSR-covered, shareable DEDB area or FF database, the counter decreases by 1.

If the SCDRSR_CVCNT counter equals zero before DBRC deallocates an RSR-covered shareable DEDB, the IMS control region returns user abend 3399. The count must be positive before a deallocation. The count can only reach zero after DBRC deallocates the last remaining RSR-covered, shareable DEDB area or FF database.

System Action: IMS terminates abnormally.

Programmer Response: Because this situation should never occur, save the IMS dump and contact the IBM Support Center.

3400

Explanation: This abend is issued by the sample status code error handling routine DFS0AER. Abnormal termination was requested by the sample application program.

Possible reasons are:

- Operator requested abend as a result of error status code.
- Application program requested abend as a result of error status code.
- The sample status code error handling routine DFS0AER was invoked more than 20 times during the application program execution.

System Action: IMS processing continues.

Programmer Response: Check the application program, its invoking of DFS0AER, and the status code error listing produced by DFS0AER.

3411

Explanation: IMS encountered an error when trying to open the data set with the ddname of MODSTAT. Either the DD statement with the ddname of MODSTAT is nonexistent or the operating system has encountered an I/O error during open processing.

System Action: IMS terminates abnormally.

System Programmer Response: Either provide the

missing DD statement or create the data set referenced by the MODSTAT DD statement, or do both, and then execute IMS.

Problem Determination: 11

3412

Explanation: An I/O error was detected while attempting to read the MODSTAT data set.

System Action: IMS terminates abnormally.

System Programmer Response: Reconstruct the MODSTAT data set with the ddnames indicated in message DFS3410I or DFS3499I, and execute IMS.

Problem Determination: 11

3413

Explanation: The MODSTAT data set contains an invalid ddname.

System Action: IMS terminates abnormally.

System Programmer Response: Reconstruct the MODSTAT data set with the ddnames indicated in message DFS3410I or DFS3499I, and execute IMS.

Problem Determination: 11

3414

Explanation: IMS was unable to allocate storage.

System Action: IMS terminates abnormally.

System Programmer Response: Increase the amount of storage available to the region, and execute IMS.

Problem Determination: 11

3415

Explanation: IMS was unable to ENQ on the data set associated with the data set described in the ddname of message DFS3415X.

System Action: IMS terminates abnormally.

System Programmer Response: Wait until the other task has released the library and execute IMS.

3416

Explanation: IMS encountered an error when trying to open the data set with the ddname of MODBLKSA or MODBLKSB. Either the DD statement with the ddname of MODBLKSA or MODBLKSB does not exist, or the operating system has encountered an I/O error during open processing.

System Action: IMS terminates abnormally.

System Programmer Response: Either create the data set referenced by the MODBLKSA or MODBLKSB DD or provide the missing DD statement, or do both, and then execute IMS.

Problem Determination: 11

3417

Explanation: IMS was unable to compute the length of the DL/I control block modules.

System Action: IMS terminates abnormally.

System Operator Response: Notify the system programmer.

System Programmer Response: Determine why the module is missing, and execute IMS.

3418

Explanation: IMS was unable to delete the loaded DL/I control block modules at initialization time.

System Action: IMS terminates abnormally.

System Operator Response: Notify the system programmer.

System Programmer Response: This is probably an IMS internal error.

3419

Explanation: IMS was unable to load the DL/I control block modules.

System Action: IMS terminates abnormally.

System Programmer Response: Increase the amount of storage available to the region and execute IMS. Ensure that the active MODBLKSA(B) data set is APF-authorized.

3420

Explanation: IMS detected messages for a transaction that does not exist. The transaction definition does not match the message activity indicated on the IMS system log.

System Action: IMS terminates abnormally.

System Programmer Response: The log data set is inconsistent with the definition in the MODBLKS data set. The SMB blocks which were loaded from MODBLKS during initialization are not the same as those which were last active during the prior IMS execution. This can occur if the MODSTAT data set was reconstructed specifying an incorrect ddname of the active MODBLKS data set or by changing the contents of the MODBLKS data set while IMS was inactive. Use the same copy of MODBLKS that was in use during the last IMS execution and restart IMS with a /ERE from the last checkpoint that was taken with a DUMPQ.

Problem Determination: 1, 2, 3, 4, 5, 6, 8, 10

3421

Explanation: IMS detected incompatible control blocks during IMS initialization or during the /MODIFY COMMIT command processing. The DFSSMBOX or DFSRCTEX control block modules are incompatible with the DFSPDIRX or DFSDDIRX control block modules. The PSBs or return codes referenced do not exist.

System Action: IMS terminates abnormally.

System Programmer Response: Check the IMS system definition Stage 1 source statements for the referenced PSBs or return codes in message DFS3421. Ensure that IMS.MODBLKSx contains the proper set of control block modules, that is, DFSSMBOX, DFSPDIRX, DFSDDIRX, or DFSRCTEX.

If no errors are found after the source statements and the IMS.MODBLKSx are checked, possibly the control block modules are not assembled with the correct level of the DFSFP macro (DFSCBT40 DFSCBT20, DFSCBT30, or DFSIINM0) if the control block type referenced in message DFS3421 is RCTE.

Problem Determination: 1, 2, 3, 4, 5, 6, 8, 10

3422

Explanation: IMS was unable to acquire enough storage to move the loaded control blocks (PDIR, DDIR, SMB, or RCTE) to IPAGE storage in subpool 231 (CSA).

This abend can also be issued by DFSCPDM0 during MODIFY processing.

System Action: IMS terminates abnormally.

System Programmer Response: Increase the amount of storage for subpool 231.

Module: DFSCPDM0

Problem Determination: 1, 2, 3, 4, 5, 6, 8, 10

3430

Explanation: During processing of the TMS procedure, the module ELXKSTAR is not APF-authorized.

System Action: The TMS subsystem is terminated with abend code and dump.

System Operator Response: Contact the system programmer to authorize the ELXKSTAR module.

Module: ELXKSTAR

3431

Explanation: While loading the module ELXKALNK, the LOAD macro returns a nonzero return code.

System Action: The TMS subsystem is terminated with abend code and dump.

System Operator Response: Contact the system programmer to analyze the return code.

Module: ELXKCDSP

3432

Explanation: While scanning the Wait list for the STASK ECB, the dispatcher found there is no ECB for S-task. This is a logic error.

System Action: The TMS subsystem is terminated with abend code and dump.

System Operator Response: Contact the system programmer to analyze the problem.

Module: ELXKCDSP

3433

Explanation: During the creation of S-task, the dispatcher found that the number of S-tasks created are larger than the maximum allowed by TMS subsystem. This is a logic error.

System Action: The TMS subsystem is terminated with abend code and dump.

System Operator Response: Contact the system programmer to analysis the problems.

Module: ELXKCDSP

3434

Explanation: While processing the TMS initialization, the ELXKCINT found the current SCP(VS1) is not supported by the TMS subsystem.

System Action: The TMS subsystem is terminated with abend code and dump.

System Operator Response: Contact the system programmer to analyze the problem.

Module: ELXKCINT

3435

Explanation: While loading the module, the LOAD macro returns a nonzero return code. R5 contains the address of module name. R6 contains the original abend code from LOAD. R7 contains the original reason code from LOAD.

System Action: A dump is produced for the abend. The TMS subsystem either continues processing or is terminated.

System Operator Response: Contact the system programmer to analyze the problem.

Module: ELXKCINT

3436

Explanation: While processing command input buffer (CIB), the QEDIT macro returns a nonzero return code. R6 contains the logic code which indicates where the abend occurred. R7 contains the original return code from QEDIT.

System Action: The TMS subsystem is terminated with abend code and dump.

System Operator Response: Contact the system programmer to analyze the problems.

Module: ELXKCOSM

3439

Explanation: This abend is occurred by operator issuing `ABDUMP` command.

System Action: The TMS subsystem is terminated with abend code and dump.

Module: ELXCABN0

3440

Explanation: REASON CODE 1 (X'01'):

The return code from STIMERM SET™ indicates a logic error. The return code was copied to register 5 before the abend was issued.

System Action: The TMSS is terminated with abend code and dump.

System Operator Response: Contact the system programmer to analyze the problem.

Module: ELXKAPS1

REASON CODE 2 (X'02'):

Explanation: The return code from STIMERM CANCEL indicates a logic error. The return code was copied to register 5 before the abend was issued.

System Action: The TMSS is terminated with abend code and dump.

System Operator Response: Contact the system programmer to analyze the problem.

Module: ELXKAPS1

REASON CODE 3 (X'03'):

Explanation: A call was made to ELXKAPS2 when the skeleton subsystem was in the process of stopping (SVD1STOP set). APS services are not available and the call is invalid.

System Action: The TMSS is terminated with abend code and dump.

System Operator Response: Contact the system programmer to analyze the problem.

Module: ELXKAPS2

REASON CODE 4 (X'04'):

Explanation: A call was made to ELXKAPS2 with invalid parameters.

System Action: The TMSS is terminated with abend code and dump.

System Operator Response: Contact the system programmer to analyze the problem.

Module: ELXKAPS2

REASON CODE 10 (X'0A'):

Explanation: FREEMAIN nonzero return code to ELXKAFRM.

System Action: The TMSS is terminated with abend code and dump.

System Operator Response: Contact the system programmer to analyze the problems.

Module: ELXKAFRM

REASON CODE 11 (X'0B'):

Explanation: SETLOCK nonzero return code to ELXKAFRM.

System Action: The TMSS is terminated with abend code and dump.

System Operator Response: Contact the system programmer to analyze the problems.

Module: ELXKAFRM

REASON CODE 12 (X'0C'):

Explanation: GETMAIN nonzero return code to ELXKAGTM.

REASON CODE 13 (X'0D'):

Explanation: SETLOCK nonzero return code to ELXKAGTM.

System Action: The TMSS is terminated with abend code and dump.

System Operator Response: Contact the system programmer to analyze the problems.

Module: ELXKAGTM

REASON CODE 20 (X'14'):

Explanation: FREEMAIN nonzero return code to ELXKASSI.

System Action: The TMSS is terminated with abend code and dump.

System Operator Response: Contact the system

programmer to analyze the problems.

Module: ELXKASSI

REASON CODE 21 (X'15'):

Explanation: SETLOCK nonzero return code to ELXKASSI.

System Action: The TMSS is terminated with abend code and dump.

System Operator Response: Contact the system programmer to analyze the problems.

Module: ELXKASSI

REASON CODE 22 (X'16'):

Explanation: SUBSYSTEM FOUND TO BE ALREADY STARTED - ELXKASSI.

System Action: The TMSS is terminated with abend code and dump.

System Operator Response: Contact the system programmer to analyze the problems.

Module: ELXKASSI

REASON CODE 23 (X'17'):

Explanation: LOAD failure to ELXKASSI while loading SSI listening post modules.

System Action: The TMSS is terminated with abend code and dump.

System Operator Response: Contact the system programmer to analyze the problems.

Module: ELXKASSI

REASON CODE 24 (X'18'):

Explanation: SSI already exists - ELXKASSI or ELXKCDSP.

The TMS instance name matches an existing subsystem SSI name.

System Action: The TMS is terminated with an abend code and a dump.

System Operator Response: Contact the system programmer to analyze the problem.

Programmer Response: The SSI must be unique. Do one of the following:

- Change the INSTANCE name in the TMS SET command statement.
- Change the IMSID parameter in member DFSPBxxx in IMS.PROCLIB, or the IMSID parameter in the IMS procedure library for the IMS system with the duplicate subsystem SSI name.
- Change the duplicate subsystem SSI name in member IEFSSNxx in SYS1.PARMLIB.

Module: ELXKASSI or ELXKCDSP

REASON CODE 32 (X'20'):

Explanation: GETMAIN nonzero return code to ELXKABSK (ELXKABSK and ELXKABGS).

System Action: The TMSS is terminated with abend code and dump.

System Operator Response: Contact the system programmer to analyze the problems.

Module: ELXKABSK

REASON CODE 33 (X'21'):

Explanation: SETLOCK nonzero return code to ELXKABSK (ELXKABSK and ELXKABGS).

System Action: The TMSS is terminated with abend code and dump.

System Operator Response: Contact the system programmer to analyze the problems.

Module: ELXKABSK

REASON CODE 35 (X'23'):

Explanation: Invalid input passed to ELXKABSK to free a stack (ELXKABFS).

System Action: The TMSS is terminated with abend code and dump.

System Operator Response: Contact the system programmer to analyze the problems.

Module: ELXKABSK

REASON CODE 44 (X'2C'):

Explanation: Size of the subsystem Entry Table Descriptor is too small (ELXKAXMI).

System Action: The TMSS is terminated with abend code and dump.

System Operator Response: Contact the system programmer to analyze the problems.

Module: ELXKAXMI

REASON CODE 45 (X'2D'):

Explanation: Could not make the subsystem address space non-swappable (ELXKAXMI).

System Action: The TMSS is terminated with abend code and dump.

System Operator Response: Contact the system programmer to analyze the problems.

Module: ELXKAXMI

3469

Explanation: While acquiring stack storage during prologue processing, the stack manager abends due to unavailable storage.

System Action: The TMS Subsystem terminates with an abend code and dump.

System Programmer Response: Contact the system programmer to analyze the problem.

Module: ELXKALNK

3476

Explanation: The control region initialization detects that the Extended Terminal Option (ETO) feature has not been either installed or licensed as was requested with the execution parameter ETO=Y. A DFS3676 message indicating the error accompanies this abend.

System Action: IMS terminates abnormally.

Programmer Response: Correct the condition indicated in the accompanying message. See the *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis* for more information.

Problem Determination: 1, 4, 5, 6

Module: DFSAINB0

3477

Explanation: The TM initialization detects that the primary master logical terminal (PMTO) is not defined in the system. IMS requires the PMTO to be properly specified in the system definition. A DFS0507I message indicating the error accompanies this abend.

System Action: IMS terminates abnormally.

System Programmer Response: Correct the condition indicated in the accompanying message. See the *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis* for more information.

Module: DFSAINB0

3498

Explanation: An unexpected user environment error was detected during DL/I processing of a HALDB. The error might have been detected during processing for one of these events:

- Selection of a HALDB partition
- Validation of an extended pointer set
- Correction of an extended pointer set

For a description of the reasons for this abend, see *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*.

System Action: The application program terminates abnormally.

Problem Determination: 1, 3, 6, 8, 17a through 17d, 35, 40

3499

Explanation: During processing of a DL/I call for a HALDB, one of two situations occurred:

- A request for the abend was encountered from a prior partition structure INIT call or a prior partition structure REBUILD call.
- In the partition selection call (FIRST, NEXT, or TARGET partition), the request for the abend from the Partition Selection exit was received.

In both cases, the abend is assumed to be the result of return code 8 or 12 from the Partition Selection exit.

System Action: The application program terminates abnormally.

Programmer Response: Examine the Partition Selection Exit that requested the abend and determine why the request was made:

- If the reason for the prior partition structure call was Initialization or Rebuild and the return code passed to IMS from the exit was 8, analyze the exit to determine why the return code was 8. If the reason for the prior partition structure call was Termination, the return code from the exit is ignored.
- If the reason for the partition selection call was FIRST or TARGET and the return code passed to IMS from the exit was 8 or 12, analyze the exit to determine why the return code was 8 or 12. If the reason for the partition selection call was NEXT and the return code passed to IMS from the exit was 8, analyze the exit to determine why the return code was 8.

The call reason can be found in the PECACT field of the DFSPECA control block, and the return code can be found in the PECRC field. For more information on the Partition Selection exit, see the *IMS Version 9: Customization Guide*.

3500-3998

Explanation: Reserved for customer use.

3999

Explanation: A code path was taken that was coded as "this should never occur."

System Action: The IMS subsystem terminates with an abend code and dump.

System Operator Response: Contact the system programmer to analyze the problem.

Module: DBFLBEU0, DBFCDAR0

4000-4093

Explanation: Reserved for customer use.

4095

Explanation: This code indicates that an IMS TCB is being terminated abnormally because a different IMS TCB in the control region has terminated abnormally. The initial abend will contain the abend code that describes the problem. The 4095 abend is normal under these circumstances.

System Action: IMS terminates abnormally.

Programmer Response: Obtain the SDUMP or SYSUDUMP data set.

Problem Determination: The dump data set contains information about the original problem. Problem analysis should continue, using the original abend conditions.

Message DFS629I, showing the TCB abend codes other than U4095, and the other related error messages, can be helpful for problem determination. See *IMS Version 9: Messages and Codes, Volume 2* for more information.

Chapter 6. BPE Messages

This section explains the messages issued from the Base Primitive Environment (BPE).

BPE0000I *displayoutput*

Explanation: Message BPE0000I is the message number associated with output generated by the `DISPLAY` command verb for BPE resources.

In the message text, *displayoutput* is output text from the display verb. Typically, when a display command is issued against a resource, the output will consist of header lines, and then one or more data lines containing information about the resources being displayed.

For more information see the `DISPLAY` command for each resource type in the *IMS Version 9: Base Primitive Environment Guide and Reference*.

System Action: None.

System Programmer Response: None.

Module: BPECTRA0, BPECURF0, BPEHT100

BPE0001E BPE INITIALIZATION ERROR IN MODULE *module*

BPE0001E *details*

Explanation: An error occurred in early BPE initialization. This is a two-line message. Each line begins with the message number.

In the message text:

module The module detecting the error

details A one-line explanation of the type of error that was detected

version The hexadecimal invalid version number from the definition module

The *details* line of the BPE0001E message further explains the error detected, and can be one of the following:

- **MODULE** *module* **HAS AN INVALID VERSION NUMBER** *version*

  A BPE definition module had an invalid version number. BPE uses version numbers as a consistency check to ensure that the definition modules being loaded match the version of BPE that is running.

  In the message text:

  module The BPE definition module in which the invalid version was detected

  version The hexadecimal invalid version number from the definition module

- **MODULE** *module* **IS LINKED REENTRANT - IT MUST BE NON-REENTRANT**

  A BPE definition module was loaded into key zero storage. BPE definition modules are modules that contain data (control blocks), and thus must be loaded into storage that is in the same storage key in which BPE is running. The most common cause for this error message is linking a definition module as reentrant, which loads it into key zero storage. BPE definition modules should be link-edited as non-reentrant.

  In the message text:

  module The BPE definition module that was loaded in key zero storage

- **UNKNOWN ERROR, MODULE RC=***rc*

  An internal error occurred that BPE does not recognize.

  In the message text:

  rc The return code from the failing module

- **ERROR LOADING MODULE** *module* **BPELOAD RC=***rc*

  Load failed for a module.

  In the message text:

  module The name of a module that could not be loaded

  rc The return code from the BPE load service, BPELOAD

- **ERROR LOADING MODULES** *module***... BPELOAD RC=***rc*

  Load failed for several modules.

  In the message text:

  module The name of the first of several modules that could not be loaded

  rc The return code from the BPE load service, BPELOAD

- **UNABLE TO CREATE** *threadtype* **THREAD, BPETHDCR RC=***rc*

  A request to create a BPE thread (internal unit of work) failed.

  In the message text:

  threadtype A 4-character name of the thread type that could not be created

  rc The return code from the thread create service, BPETHDCR

- **MODULE** *module* **IS NOT A VALID** *type* **DEFINITION MODULE**

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BPE encountered an error with an internal BPE definition module. BPE uses definition modules to construct its execution environment. If a definition module is not correct, BPE cannot build the appropriate environment.

In the message text:

module The name of a BPE definition module that is in error

type The type of definition module in error

- **UNABLE TO GET NECESSARY STORAGE, BPEGETM RC=***rc*

  BPE could not obtain the required storage.

  In the message text:

  rc The return code from the BPE GETMAIN service, BPEGETM

- **UNABLE TO GET STORAGE FOR** *blocktype* **BLOCK, BPECBGET RC=***rc*

  BPE could not obtain storage for a required control block.

  In the message text:

  blocktype
  A 4-character name of an internal BPE control block that could not be obtained

  rc The return code from the BPE control block get service, BPECBGET

- **ERROR READING PROCLIB DATA SET, BPERDPDS RC=***rc*

  BPE could not read a PROCLIB DD data set. This message follows message BPE0002E, which provides further details on the specific data set and member that could not be read.

  In the message text:

  rc The return code from the BPE partitioned data set reading service, BPERDPDS

- **ERROR PARSING** *datasettype***, BPEPARSE RC=***rc*

  An error was detected while trying to parse a configuration data set. This message follows message BPE0003E, which provides further details on the error.

  In the message text:

  data_set_type
  A description of the type of data set that was being parsed. This can be one of the following:
  - **BPE CONFIG MEMBER**: The main BPE configuration PROCLIB member specified on the BPECFG parameter of the startup JCL or procedure.
  - *component* **USER EXIT LIST MEMBER**: The user exit list PROCLIB member for the indicated IMS component (for example, BPE, CQS, OM, RM, or SCI). This is the user exit list member specified on the EXITMBR statement in the BPE configuration PROCLIB member.

  rc The return code from the BPE parsing service, BPEPARSE.

- **INITIALIZATION FAILED FOR** *service***, RC=***rc*

  BPE was unable to initialize a BPE system service.

  In the message text:

  service The name of the BPE service that failed initialization. Values for this field include:
  - **BPE RESMGR**:An error occurred when BPE tried to establish a resource manager routine to clean up global resources used by BPE. The return code in this message is the return code from the MVS RESMGR macro call that failed.
  - **USER EXITS**:An error occurred while trying to load user exit modules. This message might be preceded by other error messages that indicate the problem. The return code from the module that loads the user exits (BPEUXRF0) is in the *rc* field in this message.
  - **BPE SVC**:An error occurred when BPE tried to initialize the BPE SVC routine. BPE provides an internal SVC routine for use by BPE and IMS components. The SVC is installed dynamically when a BPE address space is started. This error message is issued when the BPE SVC could not be installed.

    If the *rc* field in the message is X'00000020', you are probably trying to start the address space on a z/OS system that is not at the required maintenance level. The MVS system must be at least at MVS SP 4.3.0 or higher. If the MVS system is at MVS SP 5.2.0 or below, you must have MVS APARs OW13312 and OW13315 applied.

  rc The return code from the lower level initialization module that encountered the error.

- **INVALID CALLABLE SERVICE CODE** *code* **IN MODULE** *module*

  BPE detected an invalid user exit callable service code in the indicated module. Both BPE and IMS components that run with BPE can define callable services that user exits can use. Each callable service has a callable service code used to request the service. This error indicates that there is a definition error in the specified module.

  In the message text:

  code The callable service code in error, in hexadecimal.

module The name of the callable service module that had the invalid callable service code defined.

System Action: Abend U3400 with subcode 05 follows this message. The address space terminates.

System Programmer Response: If the error described in this message is caused by environmental conditions (for example, insufficient storage or modules missing from IMS.SDFSRESL), correct the indicated problem and restart the address space. Otherwise, save any dump and SYSLOG information, and contact the IBM Support Center.

Module: BPEAWI00, BPECBI00, BPECMDI0, BPEDSI00, BPEHTI00, BPEINIT0, BPEMSGI0, BPEPCFG0, BPERV1I0, BPETRI00, BPEUXI00

BPE0002E **ERROR READING** *ddname* **MEMBER** *member*

BPE0002E *details*

Explanation: An error occurred trying to read a partitioned data set member. This is a two-line message. Each line begins with the message number.

In the message text:

ddname
The DD name of the data set being read

member
The member name of the data set being read

details A one-line explanation of the type of error detected

The *details* line of the BPE0002E message further explains the error detected, and can be one of the following:

- **OPEN FAILED FOR DATA SET**

  The BPE PDS read service could not open the data set for reading.
- **DATA SET RECORDS ARE NOT FIXED FORMAT**

  The data set specified records that were not in fixed format. The BPE PDS read service requires fixed-format data sets.
- **MEMBER NOT FOUND IN DATA SET**

  The indicated member was not in the partitioned data set.
- **BSAM READ FAILED READING MEMBER**

  An error occurred during the reading of the data set member.
- **UNABLE TO OBTAIN SUFFICIENT STORAGE FOR MEMBER TO BE READ**

  The PDS read service could not obtain the storage necessary to read the data set member.

System Action: The BPE PDS read service does not take any further action after issuing this message. The caller of the service might provide additional diagnostic messages or terminate the address space.

System Programmer Response: Correct the error as indicated in this message.

Module: BPERDPD0

BPE0003E **AN ERROR OCCURRED PARSING** *description*

BPE0003E **AT LINE** *line*, **CHARACTER** *char*

BPE0003E **FAILING TEXT:** *"text"*

BPE0003E *details*

Explanation: An error occurred in the BPE parsing service. This is a four-line message. Each line begins with the message number.

In the message text:

description
A text description of what was being parsed.

line The line number of the data where the error occurred. For data that is not line-oriented, the line number is omitted.

char The position of the character on the line where the error was detected. For data that is not line-oriented, *char* identifies the position of the character within the input data.

text Up to 16 characters of the text where the error was detected.

details A one-line explanation of the type of error detected.

The *details* line of the BPE0003E message further explains the error detected, and can be one of the following:

- **INVALID KEYWORD DETECTED**

  The parser found an unknown keyword in the input data.
- **UNKNOWN POSITIONAL PARAMETER**

  The parser found a positional parameter in the input data when one was not expected.
- **"=" ENCOUNTERED WHEN "(" EXPECTED**

  The parser found an equal sign in the input data when a left parenthesis was expected.
- **EARLY END OF INPUT DATA**

  The input data ended before all levels of parentheses were closed.
- **KEYWORD ENCOUNTERED WHEN VALUE EXPECTED**

The input data contained a keyword when the parser expected a value.

- **NUMERIC VALUE OUTSIDE OF LEGAL RANGE**

  A numeric value was outside the allowed range for the parameter.
- **DECIMAL NUMBER CONTAINED NONDECIMAL DIGITS**

  A decimal number contained a non-decimal character.
- **HEXADECIMAL NUMBER CONTAINED NONHEX DIGITS**

  A hexadecimal number contained a non-hexadecimal character.
- **UNKNOWN KEYWORD VALUE DETECTED**

  The parser found a parameter that could be one of a set of keyword values. The parameter was not one of the values in the set.
- **DUPLICATE KEYWORD PARAMETER DETECTED**

  The parser found an unrepeatable keyword more than once in the input data.
- **A REQUIRED PARAMETER WAS OMITTED**

  A required parameter was not found in the input data.
- **CHARACTER VALUE WAS TOO LONG FOR PARAMETER**

  The character value specified was too long for the parameter field.
- **A REQUIRED VALUE WAS OMITTED**

  A keyword was coded without specifying a value. A value is required.

System Action: The BPE parsing service does not take any further action after issuing this message. The caller of the service can provide additional diagnostic messages or terminate the address space.

System Programmer Response: Correct the error as indicated in the BPE0003E message.

Module: BPEPARS0

BPE0004I BPECFG= NOT SPECIFIED ON STARTUP PARMS - DEFAULTS BEING USED

Explanation: BPE could not find the specification for the BPE configuration data set in the startup parameters.

System Action: The address space continues initialization. BPE runs with defaults for all parameters in the BPE configuration data set.

System Programmer Response: If the BPE configuration parameter defaults are acceptable, no action is required. Otherwise, create a BPE configuration member in the data set pointed to by the PROCLIB DD statement and specify BPECFG=*member_name* in the startup parameters of the job that starts the address space.

Module: BPEPCFG0

BPE0005I UNKNOWN *component* **TRACE TYPE** *type* **IN PROCLIB MEMBER** *member*-**IGNORED**

Explanation: A TRCLEV= statement was found in the BPE configuration PROCLIB data set member for an unknown trace table type.

In the message text:

component
: The name of the IMS component that was specified on the TRCLEV statement (for example, BPE, CQS, OM, RM, or SCI) being parsed

type
: The type of the trace table that was unknown

member
: The member name of the PROCLIB DD data set that was being processed

System Action: The address space initialization continues. BPE ignores the invalid trace specification.

System Programmer Response: Correct the TRCLEV statement.

Module: BPEPCFG0

BPE0006I *aaaabbbb* **TCB ABEND** *cdddd*-*eeeeeeee,* **THD=***ffffretrystatus*

BPE0006I MODULE ID = *gggggggggggggggg* **EP =** *hhhhhhhh*

BPE0006I PSW = *iiiiiiii iiiiiiii***OFFSET =** *jjjjjjjj*

BPE0006I R00-03 *kkkkkkkk kkkkkkkk kkkkkkkk kkkkkkkk*

BPE0006I R04-07 *kkkkkkkk kkkkkkkk kkkkkkkk kkkkkkkk*

BPE0006I R08-11 *kkkkkkkk kkkkkkkk kkkkkkkk kkkkkkkk*

BPE0006I R12-15 *kkkkkkkk kkkkkkkk kkkkkkkk kkkkkkkk*

Explanation: This seven-line message is printed when an abend occurs. It documents the environment at the time of abend. Each line begins with the message number.

In the message text:

aaaa
: The owning IMS component of the TCB that abended (for example, BPE, CQS, OM, RM, or SCI).

bbbb The 4-character TCB type of the TCB that abended.

c Whether the abend is a system abend or a user abend. S is for a system abend; U is for a user abend.

dddd The abend code. For system abends, this is a 3-character hexadecimal code. For user abends, this is a 4-character decimal code.

eeeeeeee
The value in register 15 at the time of abend. For some abends, this is the abend subcode.

ffff The 4-character BPE thread (internal unit of work) name of the thread that was running when the abend occurred. If the thread type cannot be determined, this field is set to question marks (????).

retrystatus
Whether or not the abend is being retried (that is, whether the system is attempting to recover from the abend). If the abend is being retried, *retrystatus* is the character string "(RETRYING)". If the abend is not being retried, *retrystatus* is blank.

gggg... The abending module's name from its module ID, if it can be determined.

hhhhhhhh
The entry point address of the abending module, if it can be determined.

iiiiiiii iiiiiiii
The PSW (program status word) contents at the time of abend.

jjjjjjjj The offset within the abending module in which the abend occurred, if it can be determined.

kkkkkkkk
The contents of the registers at the time of abend.

System Action: If the abend is being retried (*retrystatus* is "(RETRYING)" in the first line of the message), the system attempts to recover from the abend and the address space continues to function.

If the abend is not being retried, the action taken after this message depends on whether the abending TCB is considered a critical TCB to the address space. If it is not critical, the TCB is terminated, but the address space continues execution. If it is critical, the address space is terminated abnormally.

System Programmer Response: Save any dump and SYSLOG information, and contact the IBM Support Center.

Module: BPEINIT0, BPESYES0

BPE0007I *component* **BEGINNING PHASE 1 OF SHUTDOWN**

Explanation: BPE is beginning the first phase of shutting down the address space.

In the message text:

component
The name of the IMS component being shut down.

System Action: The address space enters the first phase of termination, in which all of the IMS component TCBs are terminated.

Module: BPESYTR0

BPE0008I *component* **BEGINNING PHASE 2 OF SHUTDOWN**

Explanation: BPE is beginning the second phase of shutting down the address space.

In the message text:

component
The name of the IMS component being shut down.

System Action: The address space enters the second phase of termination, in which all of the BPE system TCBs are terminated.

Module: BPESYTR0

BPE0009I *component* **SHUTDOWN COMPLETE**

Explanation: Shutdown of the address space completed. BPE is returning to z/OS.

In the message text:

component
The name of the IMS component being shut down.

System Action: The address space terminates normally.

Module: BPESYTR0

BPE0010I PSW AND REGISTERS AT ABEND ARE NOT AVAILABLE

Explanation: An abend occurred and the BPE system ESTAE routine received control with no SDWA available. The ESTAE is unable to provide diagnostic information normally obtained from the SDWA, such as PSW (program status word) and register contents at abend.

System Action: BPE continues to process the abend with limited capability because of the lack of the SDWA.

Module: BPESYES0

BPE0011E ABEND IN BPE SYSTEM ESTAE ROUTINE (BPESYES0)

Explanation: An abend occurred in the BPE system ESTAE module itself while it was processing a prior abend.

System Action: This message should be followed by a z/OS symptom dump on the z/OS console. Additionally, a SYS1.LOGREC entry is generated for the abend. The BPE ESTAE module attempts to recover from the abend and continues processing the original abend.

Module: BPESYES0

BPE0012E BPE ETXR UNABLE TO FIND *block* BLOCK FOR TCB AT *address*

Explanation: The BPE end of task exit routine (ETXR) was called when a TCB in the address space terminated. The routine tried to process the task termination, but was not able to locate a required BPE control block. This is probably caused by internal control block errors or overlays within the address space.

In the message text:

block The name of the BPE control block that could not be found

address
The address of the terminating TCB

System Action: BPE attempts to clean up the TCB. However, without the required control blocks, the cleanup might not be successful, and other TCBs in the address space might not terminate.

System Programmer Response: If the address space appears hung (is not processing or does not terminate), cancel the address space with a dump, and contact the IBM Support Center.

Module: BPESYET0

BPE0013E VERSION MISMATCH BETWEEN BPE AND *component*

BPE0013E BPE MODULE VERSION IS *bver.brel.bptrel*

BPE0013E *component* WAS ASSEMBLED AT BPE VERSION *pver.prel.pptrel*

Explanation: The BPE version on which the identified IMS component was built does not match the version of the BPE modules that were loaded. This can occur, for example, if the starting IMS component was assembled at one BPE version and the IMS.SDFSRESL contained BPE modules at a different BPE level.

This is a three-line message. Each line begins with the message number.

In the message text:

component
An up-to-4 character name of the IMS component being started

bver The version number of BPE modules

brel The release number of BPE modules

bptrel The point-release number of BPE modules

pver The version number of BPE macros at which the IMS component was assembled

prel The release number of BPE macros at which the IMS component was assembled

pptrel The point-release number of BPE macros at which the IMS component was assembled

System Action: BPE abends during early initialization with abend U3400, subcode X'09'.

System Programmer Response: This problem is probably caused by a IMS.SDFSRESL mismatch. Ensure that the IMS component being started is using the correct version of the IMS.SDFSRESL.

Module: BPEINIT0

BPE0014E ABEND IN RECOVERY ROUTINE

Explanation: A BPE recovery routine (BRR) that was intended to provide recovery for abends in a section of code itself encountered an abend. (A BRR is an internal recovery routine established by either BPE or the IMS component using BPE to protect a functional area. BRRs run in an MVS ESTAE environment and attempt to recover from abends that occur in mainline code.)

System Action: The BPE ESTAE routine treats this abend as if the recovery routine indicated that it could not recover, and continues abend processing. Usually, this results in the abnormal termination of the address space; however, if there were other BRRs established when the abend occurred, recovery of the original abend still might occur.

System Programmer Response: Save any dump and SYSLOG information, and contact the IBM Support Center.

Module: BPESYES0

BPE0015I UNKNOWN *component* EXIT TYPE *type* IN EXIT LIST PROCLIB MEMBER *member*- IGNORED

Explanation: While processing a user exit list PROCLIB member, BPE encountered an EXITDEF statement that specified a user exit type that was not defined to BPE. The exit definition for the indicated type is ignored.

In the message text:

component
The name of the owning IMS component of the user exit list member that was being processed (for example, BPE, CQS, OM, RM, or SCI).

type The up-to-8 character exit type name that was undefined

member
The user exit list PROCLIB member name

System Action: The user exit definition is ignored. Processing of the user exit list PROCLIB member continues.

System Programmer Response: Examine the indicated user exit list PROCLIB member and correct the EXITDEF statement for the indicated user exit type.

Module: BPEUXRF0

BPE0016I ERROR LOADING *component type* **EXIT** *module (service* **RC=***rc)*

Explanation: While processing a PROCLIB member for a user exit list, BPE was unable to load a user exit that was specified on an EXITDEF statement.

In the message text:

component
The name of the owning IMS component of the user exit list member that was being processed (for example, CQS, OM, RM, or SCI).

type The up-to-8 character exit type name of the exit that could not be loaded.

module The load module name of the exit that could not be loaded.

service The name of the failing service that prevented the exit from being loaded. The most likely failing service is BLDL, which is the z/OS service that BPE uses to locate the user exit module to load. This usually means that BLDL could not find the indicated exit module in the STEPLIB or JOBLIB data set for the job.

rc The 4-digit hexadecimal return code from the failing service.

System Action: The user exit module is ignored. Processing of the PROCLIB member continues. If this error occurs in the initial PROCLIB member processing during early address space initialization, BPE abends with abend U3400, subcode 5. If this error occurs during `REFRESH USEREXIT` command processing, the command is ignored, and no changes are made to the user exit environment.

System Programmer Response: Examine the indicated PROCLIB member for the user exit list and correct the EXITDEF statement for the indicated user exit type and module. If the BPE0016I message was issued during address space initialization, restart the address space. If the message was issued in response to a `REFRESH USEREXIT` command, reissue the command.

Module: BPEUXRF0

BPE0017I MULTIPLE *type* **STATEMENTS IN** *member* **PROCLIB MEMBER - LAST WILL BE USED**

Explanation: While processing a PROCLIB member, BPE encountered multiple statements of a specific type when only one was expected. BPE uses the last statement of the duplicated type; the others are ignored.

In the message text:

type A short description of the type of statement that was duplicated

member
The PROCLIB member name

System Action: Processing continues.

System Programmer Response: No response is required. However, you might want to examine the indicated PROCLIB member to ensure that the values specified on the final statement are correct.

Module: BPETRI00, BPEUXRF0

BPE0018I DUPLICATE EXIT *module* **SPECIFIED FOR** *component type* **EXIT - IGNORED**

Explanation: While processing a PROCLIB member for a user exit list, BPE found the same user exit module specified more than once in a single exit list (EXITS parameter) on an EXITDEF statement. Only the first instance of the module is in effect; all subsequent specifications of the module are ignored.

In the message text:

module The name of the user exit module that was specified more than once

component
The name of the owning IMS component of the user exit list member that was being processed (for example, BPE, CQS, OM, RM, or SCI).

type The up-to-8 character exit type name of the exit being processed

System Action: The duplicate user exits after the first occurrence are ignored. Processing of the user exit PROCLIB continues.

System Programmer Response: No response is required. However, you might want to examine the EXITDEF statement to insure that the exits specified are listed in the correct order for your installation. User exits are called in the order they are listed on the EXITS statement.

Module: BPEUXRF0

BPE0019E *componenttype* **USER EXIT MODULE** *module* **ABEND** *code*

Explanation: An abend occurred while a user exit module was in control. "In control" means that BPE gave control to the exit. However, the abend does not have to be in the exit module itself. This message is also issued if the exit called another module, which then abended.

In the message text:

component
The name of the owning IMS component of the user exit type being called (for example, CQS, OM, RM, or SCI).

type The up-to-8 character exit type name of the exit that abended.

module The load module name of the exit that abended.

code The abend code. For system abends, the format of code is S*xxx*, where *xxx* is the 3-digit abend code in hexadecimal. For user abends, the format of code is U*dddd*, where *dddd* is the 4-digit abend code in decimal.

System Action: BPE protects all user exits with a recovery routine. When a user exit abends, BPE attempts to recover from the abend and continue processing. Recovery actions include the following:

- The first time a specific user exit module abends after it is loaded, BPE issues an SDUMP to dump the address space for the abend. For abends after the first abend, BPE does not dump the address space again; however, it does generate a SYS1.LOGREC entry for each abend occurrence.
- If the number of abends for a specific user exit module reaches or exceeds the abend limit value for the exit's user exit type, no further calls are made to the exit until it is refreshed. The abend limit for an exit type is specified by the ABLIM parameter on the EXITDEF statement.

After a user exit abends, BPE attempts to call any other exit modules that were specified after the failing exit in the EXITS exit list.

System Programmer Response: Examine the SDUMP, the SYS1.LOGREC entries, or both to determine the problem with the user exit. Correct the problem with the exit, rebind the exit to the job's libraries, and issue the `REFRESH USEREXIT` command. The `REFRESH USEREXIT` command loads a copy of the corrected exit and causes BPE to resume calling the exit module whenever exits of its type are invoked.

Module: BPEUXCL0

BPE0020I **ABEND LIMIT REACHED FOR** *component type* **USER EXIT MODULE** *module*

Explanation: The indicated user exit module reached the abend limit for the exit type as specified in the ABLIM parameter on the EXITDEF statement.

In the message text:

component
The name of the owning IMS component of the user exit type being called (for example, BPE, CQS, OM, RM, or SCI).

type The up-to-8 character exit type name of the exit that abended

module The load module name of the exit that abended

System Action: No further calls are made to the indicated user exit module until the next refresh of the exit. Refreshing the user exit resets the abend count for the exit to zero, allowing it to be called again.

System Programmer Response: Examine the SDUMP, the SYS1.LOGREC entries, or both to determine the problem with the user exit. Correct the problem with the exit, rebind the exit to the job's libraries, and issue the `REFRESH USEREXIT` command. The `REFRESH USEREXIT` command loads a copy of the corrected exit and causes BPE to resume calling the exit module whenever exits of its type are invoked.

Module: BPEUXCL0

BPE0021E **ABEND** *code* **IN BPE SVC INIT MODULE BPESVCI0, PSW=***psw1 psw2*

Explanation: An abend occurred while module BPESVCI0 was in control. Module BPESVCI0 is the module that initializes the BPE SVC routine (an internal SVC used by BPE and other IMS components). BPESVCI0 processing is protected by an internal ESTAE, which attempts to retry from the abend and clean up any global resources (common storage, MVS Enqueues) that BPESVCI0 obtained. Message BPE0021E is issued to alert the operator that an abend occurred.

In the message text:

code The abend code. For system abends, the format of code is S*xxx*, where *xxx* is the 3-digit abend code in hexadecimal. For user abends, the format of code is U*dddd*, where *dddd* is the 4-digit abend code in decimal.

psw1 The first word of the PSW (program status word) at abend.

psw2 The second word of the PSW at abend.

System Action: BPE collects diagnostic data about the abend, and then resumes execution in a cleanup

routine within BPESVCI0. This routine attempts to release any global resources that BPESVCI0 obtained as a part of its processing. The routine returns to the BPESVCI0's caller, which can choose to continue processing or to terminate abnormally.

The first time that BPESVCI0 abends, its ESTAE takes an SDUMP of the address space, and causes a record to be written to the SYS1.LOGREC data set to document the abend. If BPESVCI0 abends a second time or more, its ESTAE does not take another SDUMP. However, it writes a record to SYS1.LOGREC.

System Programmer Response: Save any dump, SYSLOG, and SYS1.LOGREC information and contact the IBM Support Center.

Module: BPESVCI0

BPE0022E ABEND *code* IN BPE SVC PROCESSING, PSW=*psw1 psw2*

Explanation: An abend occurred during BPE SVC processing. The BPE SVC module (BPESVC00) establishes an ESTAE to protect its processing. This ESTAE attempts to retry from the abend and clean up any global resources (common storage, MVS Enqueues) that BPESVC00 obtained. Message BPE0022E is issued to alert the operator that an abend occurred.

In the message text:

code The abend code. For system abends, the format of code is S*xxx*, where *xxx* is the 3-digit abend code in hexadecimal. For user abends, the format of code is U*dddd*, where *dddd* is the 4-digit abend code in decimal.

psw1 The first word of the PSW (program status word) at abend.

psw2 The second word of the PSW at abend.

System Action: BPE collects diagnostic data about the abend, and then resumes execution in a cleanup routine within BPESVC00. This routine attempts to release any global resources that BPESVC00 obtained as a part of its processing, and returns to the caller of BPESVC00, which can choose to continue processing or to terminate abnormally.

The first time that BPESVC00 abends, its ESTAE takes an SDUMP of the address space, and causes a record to be written to the SYS1.LOGREC data set to document the abend. If BPESVC00 abends a second time or more for the same SVC call, its ESTAE does not take another SDUMP. However, it writes a record to SYS1.LOGREC.

System Programmer Response: Save any dump, SYSLOG, and SYS1.LOGREC information and contact the IBM Support Center.

Module: BPESVC00

BPE0023I *command* COMMAND REJECTED

Explanation: A command was issued, but could not be processed. The command is rejected.

Depending on the IMS component, this message might not be issued when a command is rejected. The IMS component using BPE might choose to issue its own message rejecting the command, and might request that BPE not issue the BPE0023I message.

In the message text:

command
The command that was rejected. If the command that was entered was the MVS STOP command (P jobname), then `MVS STOP` displays as the command. For all other commands, the command verb and resource type are displayed (for example, `UPDATE TRACETABLE` or `REFRESH USEREXIT`).

System Action: The command is not processed.

Module: BPEMOD00, BPECMD10

BPE0024E *command* COMMAND FAILED

Explanation: The processing for a command failed.

Depending on the IMS component, this message might not be issued when a command fails. The IMS component using BPE might choose to issue its own message about a command failure, and might request that BPE not issue the BPE0024E message.

In the message text:

command
The command that failed. If the command that was entered was the MVS STOP command (P jobname), then `MVS STOP` displays as the command. For all other commands, the command verb and resource type are displayed (for example, `UPDATE TRACETABLE` or `REFRESH USEREXIT`).

System Action: The command failed.

Module: BPEMOD00, BPECMMD10

BPE0025I STOP OF *component* IS IN PROGRESS

Explanation: An `MVS STOP` command was issued for a IMS component that is running with BPE. BPE is processing the stop request.

Depending on the IMS component, this message might not be issued when the address space is stopped. The IMS component using BPE might choose to issue its own shutdown messages and might request that BPE not issue the BPE0025I message.

In the message text:

component
The name of the IMS component that is being stopped (for example, BPE, CQS, OM, RM, or SCI).

System Action: BPE initiates a shutdown of the address space.

Module: BPEMOD00

BPE0026E CLEANUP FAILURE RC=*rc* RSN=*rsn* *component*

Explanation: An error occurred during BPE resource cleanup processing. Some resources might not be properly cleaned up.

BPE establishes a resource manager routine to clean up global resources when an address space using BPE services terminates. If the resource manager cannot clean up a particular resource, it issues a BPE0026E message.

In the message text:

rc The return code, if applicable, from the failing service. This code might help to identify the cause of the failure.

rsn The reason code, if applicable, from the failing service.

component
A short text string that identifies the component or resource that could not be cleaned up. Possible components are:

- **BPESVC**:Cleanup failed for the BPE SVC service. The return code and reason code in the message are from the BPE SVC EOMCLEANUP function. This error indicates that some of the SVC functions registered by the terminating address space might not have been properly deregistered.
- **ALESERV**:A call to the MVS ALESERV service to obtain the current address space's STOKEN failed. The return code in the message is the return code from the ALESERV macro; the reason code is always zero.

System Action: BPE resource cleanup processing continues with the next resource, and the address space terminates.

System Action: Depending on the cause of the cleanup failure, BPE might have taken an SDUMP. If this is the case, save the dump, SYSLOG, and SYS1.LOGREC information and contact the IBM Support Center. If BPE did not take an SDUMP, obtain the return code, reason code, and component from the BPE0026E message and contact the IBM Support Center with this information.

Module: BPERSM00

BPE0027E ABEND *code* IN BPE RESMGR PROCESSING, PSW=*psw1 psw2*

Explanation: An abend occurred during BPE resource manager processing while terminating an address space running with BPE services. The BPE resource manager module (BPERSM00) establishes an ESTAE to protect its processing. This ESTAE attempts to retry from the abend and to continue cleaning up global resources. Message BPE0027E is issued to alert the operator that an abend occurred.

In the message text:

code The abend code. For system abends, the format of code is S*xxx*, where *xxx* is the 3-digit abend code in hexadecimal. For user abends, the format of code is U*dddd*, where *dddd* is the 4-digit abend code in decimal.

psw1 The first word of the PSW (program status word) at abend.

psw2 The second word of the PSW at abend.

System Action: BPE collects diagnostic data about the abend, and then resumes execution in the main BPERSM00 routine, which attempts to continue cleanup with the next resource after the one that was being processed when the abend occurred.

The first time that BPERSM00 abends, its ESTAE takes an SDUMP of the address space, and causes a record to be written to the SYS1.LOGREC data set to document the abend. If BPERSM00 abends a second time or more, its ESTAE does not take another SDUMP. However, it writes a record to SYS1.LOGREC.

System Programmer Response: Save any dump, SYSLOG, and SYS1.LOGREC information and contact the IBM Support Center.

Module: BPERSM00

BPE0028I SDUMP FAILED FOR *abend* ABEND, RC=*rc*, RSN=*rsn*

Explanation: BPE issued an SDUMP call to z/OS to produce a dump of the address space after an abend, but the SDUMP was not successful.

In the message text:

abend The abend code for which the dump was taken. For system abends, the format of code is S*xxx*, where *xxx* is the 3-digit abend code in hexadecimal. For user abends, the format of code is U*dddd*, where *dddd* is the 4-digit abend code in decimal.

rc The return code from the MVS SDUMP macro.

rsn The reason code from the MVS SDUMP macro.

System Action: The SDUMP is skipped.

System Programmer Response: Use the return and reason codes from the MVS SDUMP macro to determine the cause of the SDUMP failure. These return and reason codes are documented in *z/OS MVS Programming: Authorized Assembler Services Reference, Volume 3*. If appropriate, correct the cause of the failure so that future dumps are not lost.

Module: BPEINIT0, BPERSM00, BPESVCI0, BPESVC00, BPESYES0

BPE0029I DAE SUPPRESSED DUMP FOR *abend* **ABEND**

Explanation: BPE issued an SDUMP call to z/OS to produce a dump of the address space after an abend, but the SDUMP was suppressed by z/OS dump analysis and elimination (DAE).

BPE recovery routines gather symptom string data related to an abend, and provide this data to z/OS when an SDUMP is requested. IF DAE is enabled, z/OS will suppress duplicate dumps, for example, dumps that have symptom strings identical to previously captured dumps. DAE is controlled through the MVS ADYSETxx PARMLIB member and the MVS SET DAE command. For details on specifying DAE options, see *z/OS MVS Initialization and Tuning Guide*.

In the message text:

abend The abend code for which the dump was taken. For system abends, the format of code is S*xxx*, where *xxx* is the 3-digit abend code in hexadecimal. For user abends, the format of code is U*dddd*, where *dddd* is the 4-digit abend code in decimal.

System Action: The SDUMP is skipped. Note that a BPE-generated dump will be suppressed if its symptom string matches a previous dump, and if the current DAE setting in ADYSETxx is either SUPPRESS OR SUPPRESSALL.

System Programmer Response: None.

Module: BPEINIT0, BPERSM00, BPESVCI0, BPESVC00, BPESYES0

BPE0030I *displayheader*

Explanation: Message BPE0030I is the message number associated with the header line or lines generated by the `DISPLAY` command verb for BPE resources.

In the message text, *displayheader* is one or more lines of header information associated with the output from a `DISPLAY` command.

For more information see the `DISPLAY` command for each resource type in the *IMS Version 9: Base Primitive Environment Guide and Reference*.

BPE0031E *verb* **COMMAND IS INVALID**

BPE0031E *verb resourcetype* **COMMAND IS INVALID**

Explanation: A command was issued that BPE did not recognize. Even if you entered a valid command verb, this message might be generated if you omitted a required resource type or specified a resource type to which the verb does not apply. For example, if you entered:

```
DISPLAY NAME(DISP)
```

You would receive the error message:

```
BPE0031E DISPLAY COMMAND IS INVALID
```

This error occurs because the `DISPLAY` command requires a resource type on which it is to operate. Similarly, if you entered:

```
REFRESH TRACETABLE NAME(AWE)
```

You would receive the error message:

```
BPE0031E REFRESH TRACETABLE COMMAND IS INVALID
```

This error occurs because the `REFRESH` command applies to the USEREXIT resource type, not the TRACETABLE resource type.

In the message text:

verb Is the command verb from the command that was issued.

resourcetype
Is the resource type from the command that was issued, if present.

System Action: The command is ignored.

System Programmer Response: Reenter the command with the correct verb, or verb and resource type.

Module: BPECMD00, BPECMD10

BPE0032I *verb* **COMMAND COMPLETED**

BPE0032I *verb resourcetype* **COMMAND COMPLETED**

Explanation: A command completed processing. This message is issued in two cases:

- For commands that generate a variable number of lines of output, such as DISPLAY commands. Message BPE0032I is issued to indicate the end of the command output.
- For commands that generate no other messages. Message BPE0032I is issued to provide feedback that command processing is complete.

Message BPE0032I will not be issued when a command generates a fixed number of lines of output, such as a single response line or error message line.

In the message text:

verb Is the command verb from the command that was issued.

resourcetype
Is the resource type from the command that was issued, if present.

System Action: None.

System Programmer Response: None.

Module: BPECMD10

BPE0033E MISSING COMMAND VERB

Explanation: A command was entered that is missing a command verb, which is the first word of the command string. You receive this message only if you enter a command that consists of only *keyword(value)* parameters. For example, if you enter `NAME(DISP) OWNER(BPE)`, the BPE0033E message is issued. This command does not contain a non-keyword parameter to act as the command verb.

System Action: The command is ignored.

System Programmer Response: Reenter the command with the proper command verb.

Module: BPECMD00

BPE0034E NO MATCH FOUND FOR *resourcetype* **WITH NAME** *"name"*

Explanation: A name or wild card pattern on the `NAME` parameter of a command did not match any instances of the requested resource type. For example, the command:

```
DISPLAY TRACETABLE NAME(ZZZZ,QQ*)
```

generates the following response:

```
BPE0034E NO MATCH FOUND FOR TRACETABLE
         WITH NAME "ZZZZ"
BPE0034E NO MATCH FOUND FOR TRACETABLE
         WITH NAME "QQ*"
```

In the message text:

resourcetype
Is the resource type specified in the command.

name Is the name or wild card pattern specified on the `NAME` parameter that did not match any instance of the resource type.

System Action: If some of the names listed on the `NAME` parameter of the command matched existing resource instances, the command processes against those instances. If none of the names listed on the `NAME` parameter matched existing resource instances, the command is ignored.

System Programmer Response: Reenter the command with the proper resource type names.

Module: BPECTRA0, BPECURF0

BPE0035E INVALID VALUE *"value"* **FOR KEYWORD** *keyword*

Explanation: The value specified on the indicated keyword was not valid. For example, the command:

```
UPDATE TRACETABLE NAME(DISP) OWNER(ABCD) LEVEL(GROUND)
```

would generate the following response:

```
BPE0035E INVALID VALUE "ABCD" FOR KEYWORD OWNER
BPE0035E INVALID VALUE "GROUND" FOR KEYWORD LEVEL
```

In the message text:

value The keyword parameter value that is in error.

keyword
The keyword whose value is in error.

System Action: The command is ignored.

System Programmer Response: Reenter the command with the proper value on the indicated keyword.

Module: BPECTRA0, BPECURF0

BPE0036E INTERNAL COMMAND PROCESSING ERROR, *service* **RC=***rc*

Explanation: An internal error in BPE occurred while processing the command. For details on the failure, refer to the service return code, as indicated by *service* and *rc*, in “BPE Service Return Codes” on page 3.

In the message text:

service Is the name of the failing service that prevented the command from processing.

rc Is the return code from the failing service call.

System Action: The command is ignored.

System Programmer Response: Some internal errors that result in message BPE0036E could be due to temporary conditions, such as a temporary lack of storage. Other errors indicate possible logic errors within product code. Reenter the command and see if the error reoccurs. If it does, issue a console dump of the address space immediately after entering the command and contact the IBM support center. To ensure that trace information necessary to the resolution of the problem is available, you can turn on the following BPE traces at LEVEL(HIGH): CMD, SSRV, STG, DISP.

Module: BPECMD00, BPECMD10, BPECTRA0, BPECURF0

BPE0037E UNABLE TO START BPE: *details*

Explanation: The BPE address space startup module, BPEINI00, encountered an error that prevented a BPE address space from starting. In the message text:

details A description of the problem that prevented the address space from starting. *details* is one of the following situations:

- NOT APF AUTHORIZED

  The address space being started is not APF-authorized. All BPE and IMS component modules must be in data sets that are APF-authorized. In addition, module BPEINI00 must be link-edited with authorization code 1: SETCODE AC(1)

- NOT RUNNING IN KEY 7

  Module BPEINI00 received control in a key other than key 7. BPE must run in key 7. Ensure that module BPEINI00 is correctly added to MVS PPT (the program properties table).

- BPEINIT= PARM MISSING OR INVALID

  Either module BPEINI00 could not find the BPEINIT= keyword on the JCL startup parameters (PARM=), or the specified module name was missing or invalid. The BPEINIT= parameter is required and identifies the name of the BPE startup parameter module. The parameter module defines the type of IMS component address space to start.

- ERROR LOADING BPEINIT= MODULE *module*

  The module specified by the BPEINIT= keyword on the JCL startup parameters (PARM=) could not be loaded.

  In the message text:

  module The name of the module specified in the BPEINIT= keyword that could not be loaded.

- BPEINIT= MODULE *module* LINKED AS REENTRANT

  The module specified by the BPEINIT= keyword on the JCL startup parameters (PARM=) was loaded into key 0 storage; this situation probably occurred due to being link-edited as reentrant. This module must be link-edited as non-reentrant.

  In the message text:

  module The name of the module specified in the BPEINIT= keyword that was linked as reentrant.

- MISSING OR INVALID PARMS IN BPEINIT= MODULE *module*

  The BPEINI00 module could not find a valid startup parameter data area (UCDB block) in the module specified by the BPEINIT= keyword on the JCL startup parameters.

  In the message text:

  module The name of the module specified in the BPEINIT= keyword.

- UNABLE TO GET STRORAGE FOR COPY OF MVS PARAMETERS

  The BPEINI00 module could not get storage for a copy of the z/OS input parameters.

- UNKNOWN ERROR

  The BPEINI00 module encountered an unknown error.

System Action: The starting address space is abnormally terminated with user BPE abend 3403.

System Operator Response: If the error described in message BPE0037E is due to environmental conditions (for example, incorrect authorization or invalid parameters), correct the indicated problem and restart the address space. Otherwise, save any job log and system log information and contact your IBM Support Center.

Module: BPEINI00

BPE0038E BPE STACK MANAGER INTERNAL ERROR

Explanation: The BPE stack storage manager was unable to obtain storage for a new stack block.

System Action: The BPE stack storage manager will issue an SDUMP the first time this condition arises to gather diagnostic data about the problem. The stack manager then suspends the caller until a stack block is eventually freed by another thread.

System Programmer Response: This message is issued when storage is not available to satisfy an internal request for stack storage within the address space. BPE will suspend the unit of work that is requesting additional stack storage until storage becomes available. However, this suspension could lead to reduced function and performance in the product that is running in the address space. You should increase the available region size for the address space and shut it down and restart it as soon as possible. If you continue to get this message, save the SDUMP produced by BPE and contact the IBM Support Center.

Module: BPESTKM0

BPE0039E BPE STACK MANAGER MULTIPLE INTERNAL ERRORS

Explanation: The BPE stack storage manager encountered multiple cases where it could not obtain storage for a new stack block.

System Action: The BPE stack storage manager issues message BPE0038E the first time it is not able to

get a new stack block when one is needed. Subsequent failures do not generate additional BPE0038E messages. However, if the stack manager repeatedly cannot get storage, it will eventually issue message BPE0039E, indicating that the storage problem is likely a chronic one, and that action should be taken quickly to resolve the storage shortage. In addition to issuing the BPE0039E message, BPE also takes a second SDUMP after the repeated failures to capture additional diagnostics.

System Programmer Response: This message is issued by the BPE stack manager after repeated failures to obtain storage. It is unlikely that the address space will function well at this point. You should increase the available region size for the address space and immediately shut it down and restart it. If you continue to get this message, save the SDUMP produced by BPE and contact the IBM Support Center.

Module: BPESTKM0

BPE0040E DYN *type* FAILED FOR *dstype*, RC=*rc*/*rsn*

DSN=*dsn*

Explanation:

Dynamic allocation or unallocation of a data set failed. In the message text:

type The type of service that failed.
- ALLOC for dynamic allocation
- UNALLOC for dynamic unallocation

dstype The data set type or DD name of the data set that BPE could not allocate or deallocate.

rc The return code from the MVS DYNALLOC call.

rsn The reason code from the MVS DYNALLOC call.

dsn The name of the data set that BPE was trying to allocate or deallocate.

System Action: The BPE dynamic allocation service returns to its caller. The caller might take some additional action based on the failure, such as issue an additional message or an abend.

System Programmer Response: Analyze the state of the data set that failed dynamic allocation or unallocation. The data set must be cataloged. For information on the dynamic allocation or unallocation return codes and reason codes, see *z/OS MVS Programming: Authorized Assembler Services Guide*.

Module: BPEDYA00

BPE0041E UNABLE TO ALLOCATE REQUESTED STORAGE

Explanation: The BPE storage allocation service, BPEGETM, could not allocate the storage requested by its caller. This message will only be issued the first time that BPEGETM could not obtain storage.

System Action: BPEGETM returns an error return code to its caller.

System Programmer Response: The storage shortage which lead to this message being issued might be due to the region size for the address space being set too small. Increase the region size by changing the REGION= parameter on the address space JCL, and restart the address space.

If the problem persists, save any dumps and contact the IBM Support Center. If no dumps were produced, take a console dump of the address space that is causing the BPE0041E message to be issued.

Module: BPESTG00

BPE0042E ERROR INITIALIZING BPE LIMITED FUNCTION SERVICES: *details*

Explanation: The initialization of BPE limited function services (LFS) failed. BPE LFS is used in certain address spaces (such as the IMS control region) that do not otherwise use BPE services. If BPE is unable to successfully initialize the LFS environment, it issues message BPE0042E to document the error.

In the message text:

details The type of error that was detected.

The details portion of the BPE0042E message further explains the error detected, and can be one of the following:

- UNABLE TO GET STORAGE

  A STORAGE OBTAIN call failed to get storage necessary to initialize the BPE LFS environment.
- UNABLE TO LOAD BPEZLFS0

  BPE could not load the main BPE LFS module, BPEZLFS0.
- INVALID BPEZLFS0 VECTOR TABLE

  The vector table at the beginning of module BPEZLFS0 was invalid. This table is used to locate all of the functional routines contained within the BPEZLFS0 load module. When processing the table, BPE detected an invalid entry.
- UNABLE TO CREATE NAME-TOKEN

  BPE attempted to create an z/OS name-token for use later by BPE LFS. The create call failed.
- UNKNOWN ERROR

An unexpected error occurred during BPE LFS initialization.

System Action: BPE LFS initialization fails, and a non-zero return code is passed back to the caller. BPE LFS services are not available. When the caller is the IMS control region, IMS initialization fails. IMS will issue message DFS2930I, followed by an abend U0071.

System Programmer Response: If the error described in this message is caused by environmental conditions (for example, insufficient storage or modules missing from IMS.SDFSRESL), correct the indicated problem and restart the address space. Otherwise, save any dump and SYSLOG information, and contact the IBM support center.

Module: BPEZINI0

Chapter 7. IMS Connect Messages

This section describes and explains all of the IMS Connect error codes and messages, and suggests corrective action.

Some messages include an **M**=*mc* value. The *mc* represents the IMS Connect module suffix that issued the message. For example, in **M=CPAR**, the issuing module is HWSCPAR0.

Some messages include an **E** =*ec* value. The *ec* represents the TCP/IP error code. Refer to your TCP/IP Messages and Codes documentation for more information on the *ec* value.

This section contains Diagnosis, Modification, or Tuning Information.

IMS Connector for Java messages and exceptions are available in PDF in *IMS Connector for Java 2.2.2 and 9.1.0.1 Online Documentation for WebSphere Studio Application Developer Integration Edition 5.1.1*. To get the most current version of the PDF, go to the IMS Library page at www.ibm.com/software/data/ims/library.html.

HWSC0000I nn HWSC0000I *IMS CONNECT READY* *hid*

Explanation: An MVS outstanding reply message used for entering IMS Connect commands.

hid identifies the HWS (the `ID` parameter of the `HWS` statement in the `HWSCFGxx` configuration files).

HWSC0001I HWSC0001I HWS ID=*hid*

Explanation: *hid* identifies the HWS (from the ID parameter of the HWS statement in the IMS Connect configuration member).

HWSC0001I HWSC0001I Maxsoc=*mso* **Timeout=***time*

Explanation: *mso* identifies maximum number of sockets per port that IMS Connect can open (from the MAXSOC parameter of the TCPIP statement in the IMS Connect configuration member).

time identifies the time, in hundredths of seconds, to be used as a timeout interval in waiting for a response (from the TIMEOUT parameter of the TCPIP statement in the IMS Connect configuration member).

HWSC0001I HWSC0001I DS ID=*did* **Status=***state*

Explanation: *did* identifies the datastore (from the ID parameter of the DATASTORE statement in the IMS Connect configuration member).

state identifies the state of the datastore:
- ACTIVE
- NOT ACTIVE
- DISCONNECT

HWSC0001I HWSC0001I IMSPLEX=*ipid* **Status=***state*

Explanation: *ipid* identifies the IMSplex (from the ID parameter of the IMSplex statement in the IMS Connect configuration member).

state identifies the state of the IMSplex
- ACTIVE
- NOT ACTIVE
- DISCONNECT

HWSC0001I HWSC0001I Group=*group* **Member=***member*

Explanation: *group* identifies the XCF group name (from the GROUP parameter of the DATASTORE statement in the IMS Connect configuration member.

member identifies the XCF member name (from the MEMBER parameter of the DATASTORE statement in the IMS Connect configuration member).

HWSC0001I HWSC0001I Target Member=*tmember*

Explanation: *tmember* identifies the XCF target member name (from the TMEMBER parameter of the DATASTORE statement in the IMS Connect configuration member).

HWSC0001I HWSC0001I RACF APPL NAME=*name*

Explanation: *name* identifies the RACF PTKTDATA class that contains the PassTicket Key.

HWSC0001I HWSC0001I Member=*member* **Target=***tmember*

Explanation: *member* identifies the group name (from the GROUP parameter of the IMSplex statement in the IMS Connect configuration member).

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tmember identifies the target member name (from the TMEMBER parameter of the IMSplex statement in the IMS Connect configuration member).

HWSC0001I HWSC0001I Port=*port* Status=*state*

Explanation: *port* identifies the appropriate port, either as a TCP/IP port number or LOCAL (from the PORTID parameter of the TCPIP statement in the IMS Connect configuration member).

state identifies the state of the port:
- ACTIVE
- NOT ACTIVE
- NOT DEFINED

HWSC0001I HWSC0001I cli usid tran stat time [ipaddress clientport]

Explanation:
cli identifies the IMS Connect client ID.
usid identifies the userid value of the client.
tran identifies the transaction code.
stat identifies the state of the datastore or port:
WFCM - IMS Connect is waiting for the client to confirm the last response.
CONF - the client is in a conversation.
time indicates the number of seconds since anything was received from the client.
ipaddress identifies the TCP/IP address of the client.
clientport identifies the TCP/IP port for the client.

HWSC0001I HWSC0001I Client=*clientname* Status=*c_state*

Explanation: *clientname* is the TCP/IP client; IMS Connector for Java client names are dynamically generated. If the client name is DELDUMMY, the connection process has completed; however, no data has been received.

c_state is the state of the connection from IMS Connect:
ACTV - the client is in the connection process.
CERR - the client is in the communications error state.
INTE - the client is in the interface error state.
RECV - IMS Connect is in receive state, waiting for data from the client.
SHUT - the client is in the shutdown state.
STOP - the client is in the process of being stopped by a STOPCLNT command.
TERM - the client is in the termination state (shutting down).
XMIT - the client has not issued a receive; IMS Connect is holding the output message.
CONN - the client is in a connected state, waiting for output from IMS.

HWSC0001I HWSC0001I NO ACTIVE DATASTORE

HWSC0001I HWSC0001I NO ACTIVE PORTS

HWSC0001I HWSC0001I NO ACTIVE CLIENTS

HWSC0001I HWSC0001I TOTAL CLIENTS=*xx* RECV=*xx* CONN=*xx* XMIT=*xx* OTHER=*xxx*

Explanation: Combinations of these messages are issued when any of the VIEW commands (VIEWDS, VIEWHWS, VIEWPORT) are executed.

System Action: The messages are issued, and IMS Connect continues to run.

HWSC0010I HELLO, WELCOME TO IMS CONNECT!

Explanation: Indicates that IMS Connect is ready.

HWSC0001I HWSC0001I IMSPLEX=*ipid* Status=*state*

Explanation: *ipid* identifies the IMSplex (from the ID parameter of the IMSplex statement in the IMS Connect configuration member).

state identifies the state of the IMSplex
- ACTIVE
- NOT ACTIVE
- DISCONNECT

HWSC0001I HWSC0001I Group=*group* Member=*member*

Explanation: *group* identifies the XCF group name (from the GROUP parameter of the DATASTORE statement in the IMS Connect configuration member.

member identifies the XCF member name (from the MEMBER parameter of the DATASTORE statement in the IMS Connect configuration member).

HWSC0001I HWSC0001I Target Member=*tmember*

Explanation: *tmember* identifies the XCF target member name (from the TMEMBER parameter of the DATASTORE statement in the IMS Connect configuration member).

HWSC0001I HWSC0001I RACF APPL NAME=*name*

Explanation: *name* identifies the RACF PTKTDATA class that contains the PassTicket Key.

HWSC0001I HWSC0001I Member=*member* Target=*tmember*

Explanation: *member* identifies the group name (from the GROUP parameter of the IMSplex statement in the IMS Connect configuration member).

tmember identifies the target member name (from the TMEMBER parameter of the IMSplex statement in the IMS Connect configuration member).

HWSC0001I HWSC0001I Port=*port* Status=*state*

Explanation: *port* identifies the appropriate port, either as a TCP/IP port number or LOCAL (from the PORTID parameter of the TCPIP statement in the IMS Connect configuration member).

state identifies the state of the port:
- ACTIVE
- NOT ACTIVE
- NOT DEFINED

HWSC0001I HWSC0001I cli usid tran stat time [ipaddress clientport]

Explanation:

cli identifies the IMS Connect client ID.
usid identifies the userid value of the client.
tran identifies the transaction code.
stat identifies the state of the datastore or port:
WFCM - IMS Connect is waiting for the client to confirm the last response.
CONF - the client is in a conversation.
XMIT - the client has not issued a receive; IMS Connect is holding the output message.
CONN - the client is in a connected state, waiting for output from IMS.
time indicates the number of seconds since anything was received from the client.
ipaddress identifies the TCP/IP address of the client.
clientport identifies the TCP/IP port for the client.

HWSC0001I HWSC0001I Client=*clientname* Status=*c_state*

Explanation: *clientname* is the TCP/IP client; IMS Connector for Java client names are dynamically generated. If the client name is DELDUMMY, the connection process has completed; however, no data has been received.

c_state is the state of the connection from IMS Connect:
ACTV - the client is in the connection process.
CERR - the client is in the communications error state.
INTE - the client is in the interface error state.
RECV - IMS Connect is in receive state, waiting for data from the client.
SHUT - the client is in the shutdown state.
STOP - the client is in the process of being stopped by a STOPCLNT command.
TERM - the client is in the termination state (shutting down).

HWSC0001I HWSC0001I NO ACTIVE DATASTORE

HWSC0001I HWSC0001I NO ACTIVE PORTS

HWSC0001I HWSC0001I NO ACTIVE CLIENTS

HWSC0001I HWSC0001I TOTAL CLIENTS=*xx* RECV=*xx* CONN=*xx* XMIT=*xx* OTHER=*xxx*

Explanation: Combinations of these messages are issued when any of the VIEW commands (VIEWDS, VIEWHWS, VIEWPORT) are executed.

System Action: The messages are issued, and IMS Connect continues to run.

HWSC0020I IMS CONNECT IN TERMINATION

Explanation: Indicates that IMS Connect has shut down.

HWSC0100W UNABLE TO ALLOCATE STORAGE FOR COMMAND; R=*rc*, S=*sc*, M=*mc*

Explanation: Storage for the command buffer cannot be allocated.

In the message text:
- *rc* identifies the return code.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 19 for service and return codes.

Table 19. Service and Return Code Explanations

Service code	Short explanation	Return code	Meaning
GETC01L	BPECBGET, the system service used to acquire the C01K.	4	An incorrect CBTE address is passed to the CG get routine. This is an internal system error.

Table 19. Service and Return Code Explanations (continued)

Service code	Short explanation	Return code	Meaning
8	Storage is unavailable to satisfy the request.		
GETFWEB	BPECBGET, the system service used to acquire the FWEB.	4	An incorrect CBTE address is passed to the CB get routine. This is an internal system error.
		8	Storage is unavailable to satisfy the request.

Module: CMDC- HWSCMOP0

System Action: This message is issued and, if possible, the requestor of the command is notified. In all cases, IMS Connect continues to run.

System Programmer Response: This is probably a storage error. Ensure that the region size for IMS Connect is large enough. If the error recurs, search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump if available.

HWSC0101E FUNCTION WORK ELEMENT PROCESSING FAILURE, FUNC=*func*; R=*rc*, S=*sc*, M=*mc*

Explanation: The function work element (FWE) cannot be processed. The FWE requests work between components and within components. This structure contains the function and parameters that a service requires for processing.

In the message text:

- *func* identifies the function requested.
- *rc* identifies the return code.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 20 for service and return code explanation.

Table 20. Service and Return Code Explanation

Service code	Short explanation	Return code	Meaning
INVFUNC	The function requested in the FWE is incorrect.	4	This is a processing error.

Module:

- CMDC - HWSCMDC0
- CMOP - HWSCMOP0

System Action: This message is issued and, if possible, the requestor of the function is notified. Otherwise, the FWE is freed. In all cases, IMS Connect continues to run.

System Programmer Response: This is probably an internal error. Search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump if available.

HWSC0110W COMMAND VERB BLOCK PROCESS FAILURE; R=*rc*, S=*sc*, M=*mc*

Explanation: Storage for the command verb block (CVB) cannot be allocated. The CVB contains the command verb and its parameters and is the structure used by all command processors to process a command in IMS Connect. Without this block, a command cannot be processed.

In the message text:

- *rc* identifies the return code.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 21 for service and return codes.

Table 21. Service and Return Code Explanations

Service code	Short explanation	Return code	Meaning
GETCVBB	BPECBGET, the system service used to acquire the CVB.	4	An incorrect CBTE address is passed to the CB get routine. This is an internal system error.
		8	Storage is unavailable to satisfy the request.

Module: CMDC - HWSCMDC0

System Action: This message is issued and, if possible, the requestor of the function is notified. In all cases, IMS Connect continues to run.

System Programmer Response: This is probably a storage error. Ensure that the region size for IMS Connect is large enough. If the error recurs, search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump if available.

HWSC0112E COMMAND PARSER FAILED, COMMAND=*hwscmd*; R=*rc*, S=*sc*, M=*mc*

Explanation: An error occurs during an attempt to parse the command from the command buffer.

In the message text:

- *hwscmd* identifies the command.
- *rc* identifies the return code.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 22 for service and return code information.

Table 22. Service and Return Code Explanation

Service code	Short explanation	Return code	Meaning
NODATA	No data exists in the command buffer.	40	This is a processing error.
INVCMD	The command verb cmd is not a valid HWS command.	41	This is a processing error.
NOPARM	The command requires parameters, but you did not supply any.	42	This is a processing error.
NO2PARM	The second parameter is missing for this command.	43	This is a processing error.
PARM1ERR	The first parameter is wrong.	44	Please use the correct syntax.

Table 22. Service and Return Code Explanation (continued)

Module: CPAR - HWSCPAR0

System Action: This message is issued and, if possible, the requestor of the function is notified. Otherwise, the command buffer is freed and IMS Connect continues to run.

System Programmer Response: Ensure that the correct command is entered. If the error recurs, search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump if available.

HWSC0114W COMMAND=*hwscmd*; R=*rc*, S=*sc*, M=*mc*

Explanation: During an attempt to propagate the command to the next level of command processing, an error is detected. The command is being forwarded to the component that can process it; however, a resource that this command is targeting might not be available.

In the message text:

- *hwscmd* identifies the command.
- *rc* identifies the return code.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 23 for an explanation of service and return codes.

Table 23. Service and Return Code Explanation

Service code	Short explanation	Return code	Meaning
INVLCMD	The command is incorrect.	4	This is a processing error.
NFNDDCT	The datastore communication table cannot be found. This table contains the information that is retrieved from the configuration member HWSCFGxx for each datastore defined.	8	This is a processing error.
NFNDDST	The datastore table cannot be found. This table maintains the activity of a datastore.	4	This is a processing error.
NFNDSVT	The server table cannot be found. This table maintains the activity of a connected client.	4	This is a processing error.
NACTO/C	The open/close thread is not active. The command can only be processed by the open/close controller and the controller is no longer active. IMS Connect could be shutting down.	4	This is a processing error.

Table 23. Service and Return Code Explanation (continued)

Service code	Short explanation	Return code	Meaning
BPEGETM	System service used to acquire the response buffer.	4	An incorrect or unsupported subpool is specified.
		8	A zero length is requested.
		12	Unable to obtain the requested storage (MVS GETMAIN failed).
NFNDCOMP	The component that handles the requested function cannot be found. An HWS component issues an interface call for another component's service and the component being requested for service cannot be located.	4	This is a processing error.
NFNDFUNC	The requested function cannot be found. An HWS component issues an interface call for another component's service and the service being requested cannot be located.	8	This is a processing error.
PORTNACT STOPPORT	Command for inactive or already stopped PORT.	4	PORT not active.

Module: CVBC - HWSCVBC0

System Action: This message is issued and, if

possible, the requestor of the function is notified. Otherwise, the command buffer is freed and the IMS Connect continues to run.

System Programmer Response: Ensure that the correct command is entered. If the service code is NFNDCOMP or NFNDFUNC, this is probably an internal error. Search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump if available.

HWSC0120W UNABLE TO SEND COMMAND RESPONSE TO HWSHOST; R=*rc*, S=*sc*, M=*mc*

Explanation: An error occurs during an attempt to send the command response back to the system console.

In the message text:

- *rc* identifies the return code.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 24 for an explanation of service and return codes.

Table 24. Service and Return Code Explanation

Service code	Short explanation	Return code	Meaning
INVLTAG	The command response tag is incorrect. Command response tags represent the types of response that are being sent.	4	This is a processing error.
NFNDCOMP	The component that handles the requested function cannot be found. An HWS component issues a call to the call interface for another component's service and the requested component cannot be located.	4	This is a processing error.

Table 24. Service and Return Code Explanation (continued)

Service code	Short explanation	Return code	Meaning
NFNDFUNC	The requested function cannot be found. An HWS component issues a call to the call interface for another component's service and the requested service cannot be located.	8	This is a processing error.

Module: CRSP - HWSCRSP0

System Action: This message is issued and the command response buffers are freed. IMS Connect continues to run.

System Programmer Response: This is probably an internal error. Search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump if available.

HWSC0130I CLOSEHWS ALREADY IN PROGRESS; M=*mc*

Explanation: IMS Connect is in the process of closing. This message is issued when a `CLOSEHWS` command is entered more than once.

In the message text:

- *mc* identifies the module issuing the message.

Module: CHWS - HWSCHWS0

System Action: If IMS Connect does not terminate after the `CLOSEHWS`command is entered, use the `VIEWHWS` command to determine the status and queues for the datastores and clients. Ensure that no clients are active. If any clients are active, IMS Connect does not terminate. You can issue the IMS Connect command `CLOSEHWS FORCE` to force IMS Connect to terminate.

HWSD0200E FUNCTION WORK ELEMENT PROCESSING FAILURE, FUNC=*func*; R=*rc*, S=*sc*, M=*mc*

Explanation: The function work element (FWE) cannot be processed. The FWE requests work between and within components. This structure contains the function and parameters that a service requires for processing.

In the message text:

- *func* identifies the function requested.

- *rc* identifies the return code.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 25 for an explanation of service and return codes.

Table 25. Service and Return Code Explanation

Service code	Short explanation	Return code	Meaning
INVFUNC	The function requested in the FWE is incorrect.	4	This is a processing error.

Module:

- DOCC — HWSDOCC0
- DSCH — HWSDSCH0
- DCVC — HWSDCVC0

System Action: This message is issued and, if possible, the requestor of the function is notified. Otherwise, the FWE is freed. In all cases, IMS Connect continues to run.

System Programmer Response: This is probably an internal error. Search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump if available.

HWSD0202W FWE FUNCTION=*func* FAILED FOR DS=*did*, COMMAND=*hwscmd* IN PROGRESS; M=*mc*

Explanation: The function *func* cannot be processed because the command identified by hwscmd is already being processed.

In the message text:

- *func* identifies the function requested.
- *did* identifies the datastore.
- *hwscmd* identifies the IMS Connect command in progress.
- *mc* identifies the module issuing the message.

Module: DSCM— HWSDSCM0

System Action: This message is issued and, if possible, the requestor of the function is notified. Otherwise, the FWE is freed. In all cases, IMS Connect continues to run.

System Programmer Response: The IMS Connect command in progress is terminating the datastore; therefore, any new function for that datastore cannot be processed.

HWSD0204W COMMAND=*hwscmd* FAILED FOR DS=*did*, COMMAND=*prev_hwscmd* ALREADY IN PROGRESS; M=*mc*

Explanation: The IMS Connect command entered for the datastore, *hwscmd*, cannot be processed because a command for that datastore, *prev_hwscmd*, is already in progress.

In the message text:

- *hwscmd* identifies the IMS Connect command that was blocked from being run by *bhwscmd*.
- *did* identifies the datastore affected by *hwscmd* and *prev_hwscmd*.
- *prev_hwscmd* identifies the IMS Connect command that is blocking *hwscmd* from running.
- *mc* identifies the module issuing the message.

Module: DSCM— HWSDSCM0

System Action: This message is issued and, if possible, the requestor of the function is notified. Otherwise, the FWE is freed. In all cases, IMS Connect continues to run.

System Programmer Response: The IMS Connect command in progress is terminating the datastore; therefore, any new commands cannot be processed. If the IMS Connect command (*hwscmd*) was `CLOSEHWS`, the IMS Connect terminates after the processing of *prev_hwscmd* completes.

HWSD0212E UNABLE TO START SCHEDULER CONTROLLER; R=*rc*, S=*sc*, M=*mc*

Explanation: Storage cannot be allocated for the scheduler controller structure, or the scheduler controller thread cannot be scheduled. A scheduler controller is started for each datastore that is defined to IMS Connect. The scheduler controller is the controller that schedules the threads associated with a datastore.

In the message text:

- *rc* identifies the return code.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 26 on page 191 for an explanation of service and return codes.

Table 26. Service and Return Code Explanation

Service code	Short explanation	Return code	Meaning
GETDSTB	BPECBGET, the system service used to acquire the datastore table (DST).	4	An incorrect CBTE address is passed to the CB get routine. This is an internal system error.
		8	Storage is unavailable to satisfy the request.
GETTWUB	BPECBGET, the system service used to acquire the thread workunit (TWU) for the scheduler controller.	4	An incorrect CBTE address is passed to the CB get routine. This is an internal system error.
		8	Storage is unavailable to satisfy the request.
INCLOSE	IMS Connect is in the process of closing. No datastore can be started.	12	This is a processing error.
SCHEDTWU	BPETHDCR, the system service used to schedule the scheduler controller thread.	4	An incorrect dispatcher work area is passed to the create thread routine.
		8	An incorrect TCB index value is passed on the TCBIDX parameter.
		12	A zero routine address is passed on the ROUTINE= parameter.
		16	An incorrect TCB table entry address is passed into the thread create routine. The BPETHDCR macro determines the TCBT address based on whether the parameter TCBTYPE, TCBIDX, or TCBDWA is specified. Ensure that this parameter is correctly coded.
		20	Unable to get storage for a thread control block (THCB) for the thread.
		24	Unable to get stack storage for the thread.
		28	The initial post of the thread failed.

Module:

- DOCC — HWSDOCC0
- DOCM — HWSDOCM0

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: Ensure that the region size in the JCL statement is large enough to accommodate the IMS Connect region. If the error recurs, search the problem-reporting databases to find a correction for the problem. If none exists, contact the

IBM Support Center. Provide the JCL, SYSLOG, and dump if available.

HWSD0222E UNABLE TO START TRANSMIT/RECEIVE THREADS FOR DS=*did*; R=*rc*, S=*sc*, M=*mc*

Explanation: Storage cannot be allocated for the transmit or receive thread structure, or either the transmit thread or the receive thread cannot be scheduled. A transmit thread and receive thread are allocated for each datastore that is defined for message transmission and reception.

In the message text:

- *did* identifies the datastore.
- *rc* identifies the return code.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 27 for an explanation of service and return codes.

Table 27. Service and Return Code Explanation

Service code	Short explanation	Return code	Meaning
GETDSBB	BPECBGET, the system service used to acquire the datastore block (DSB) for the transmit and receive threads. This is the execution block for a thread.	4	An incorrect CBTE address is passed to the CB get routine. This is an internal system error.
		8	Storage is unavailable to satisfy the request.
GETC01K	BPECBGET, the system service used to acquire the common 1024 byte (C01K) for the conversation controller. The area is used as a work area.	4	An incorrect CBTE address is passed to the CB get routine. This is an internal system error.
		8	Storage is unavailable to satisfy the request.
GETTWUB	BPECBGET, the system service used to acquire the thread workunit (TWU) for the transmit and receive threads.	4	An incorrect CBTE address is passed to the CB get routine. This is an internal system error.
		8	Storage is unavailable to satisfy the request.
SCHEDTWU	BPETHDCR, the system service used to schedule the scheduler controller thread.	4	An incorrect dispatcher work area is passed to the create thread routine.
		8	An incorrect TCB index value is passed on the TCBIDX parameter.
		12	A zero routine address is passed on the ROUTINE= parameter.

Table 27. Service and Return Code Explanation (continued)

Service code	Short explanation	Return code	Meaning
		16	An incorrect TCB table entry address is passed into the thread create routine. The BPETHDCR macro determines the TCBT address based on whether the parameter TCBTYPE, TCBIDX, or TCBDWA is specified. Ensure that this parameter is correctly coded.
		20	Unable to get storage for a thread control block (THCB) for the thread.
		24	Unable to get stack storage for the thread.
		28	The initial post of the thread failed.

Module:

- DSC1 — HWSDSC10
- DSCM — HWSDSCM0

System Action: This message is issued and IMS Connect continues to run with datastores that can be started.

System Programmer Response: On the subsequent close and startup of IMS Connect, ensure that the region size in the JCL statement is large enough to accommodate the IMS Connect region. If the error recurs, search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump if available.

HWSD0227W CLOSE FAILED FOR DS=*did*; R=*rc*, S=*sc*, M=*mc*

Explanation: An attempt to close the named datastore is unsuccessful during IMS Connect shutdown.

In the message text:

- *did* identifies the datastore.
- *rc* identifies the return code.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 28 for an explanation of service and return codes.

Table 28. Service and Return Code Explanation

Service code	Short explanation	Return code	Meaning
GETFWEB	BPECBGET, the system service used to acquire an FWE to notify all datastore to close.	4	An incorrect CBTE address is passed to the CB get routine. This is an internal system error.
		8	Storage is unavailable to satisfy the request.

Module: DOC3— HWSDOC30

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: Storage cannot be allocated to notify the datastore to close. If the error recurs, search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump if available.

HWSD0230I *type*=*id* ALREADY ACTIVE; R=*rc*, S=*sc*, M=*mc*

Explanation: An `OPENDS` or `OPENIP` command is issued for a datastore or IMSplex that is already active.

In the message text:

- *type* identifies the datastore (DS) or IMSplex (IP).
- *id* identifies the datastore or IMSplex name.
- *rc* identifies the return code.

- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 29 for an explanation of service and return codes.

Table 29. Service and Return Code Explanation

Service code	Short explanation	Return code	Meaning
ACTIVDST	The datastore is active.	0	The process is successful.
ACTIVEIP	The IMSplex is active.	0	The process is successful.
ACTVDISC	The IMSplex is active, however, it is currently disconnected.	0	The IMSplex is disconnected and will remain disconnected until the SCI is started. When the SCI is started, IMS Connect will automatically reconnect to the SCI.

Module: DOCM— HWSDOCM0

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: Ensure that the correct name is provided in the `OPENDS` or `OPENIP` command. If you are issuing the `OPENIP` command, determine if SCI has been initialized. If the error recurs, search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump if available.

HWSD0250W UNABLE TO NOTIFY MSG ORIGIN=*clientid* OF OTMA COMMUNICATION ERROR; R=*rc*, S=*sc*, M=*mc*

Explanation: IMS Connect is unable to notify the TCP/IP client who originated a message, which is either being processed or queued for processing, that a communication error with IMS OTMA has occurred.

In the message text:

- *clientid* identifies the TCP/IP client.
- *rc* identifies the return code.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 30 for an explanation of service and return codes.

Table 30. Service and Return Code Explanation

Service code	Short explanation	Return code	Meaning
COMMERR	Communi-cation error with IMS OTMA.	4	This is a processing error.

Module:

- DXMT— HWSDXMT0
- DSC3— HWSDSC30
- DSCE— HWSDSCE0

System Action: This message is issued and IMS Connect continues to run. The message whose processing caused the error is discarded.

System Programmer Response: This error can occur when the datastore is no longer active or the communication linkage to IMS Connect is broken.

HWSD0252W UNABLE TO SEND RESPONSE RECEIVED FROM DS=*did* to CLIENT=*clientid*; R=*rc*, S=*sc*, M=*mc*

Explanation: IMS Connect is unable to send the response received from a datastore to the required TCP/IP client.

In the message text:

- *did* identifies the datastore.
- *clientid* identifies the TCP/IP client.
- *rc* identifies the return code.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 31 on page 195 for an explanation of return and service codes.

Table 31. Service and Return Code Explanation

Service code	Short explanation	Return code	Meaning
INVLDTOK	Invalid server token has been detected.	4	Use the correct server token for the conversation iteration. Or, a second client is starting a conversation and is using a duplicate ID while the first client is in a conversation.
NFNDCOMP	The component that handles the requested function cannot be found. An IMS Connect component issues an interface call for another component's service and the requested component cannot be located.	4	This is a processing error.
NFNDFUNC	The requested function cannot be found. An IMS Connect component issues an interface call for another component's service and the requested service cannot be located.	8	This is a processing error.
NFNDSVT	The server table cannot be found. This table maintains the activity of a connected IMS Connect client.	4	This is a processing error or a timeout has occurred.

Module: DREC— HWSDREC0

System Action: This message is issued and IMS Connect continues to run. The response message is discarded.

System Programmer Response: This error can occur when the client is no longer active and is not connected to IMS Connect. If the service code is NFNDCOMP or NFNDFUNC, this is probably an internal error. Search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump if available.

HWSD0254W UNABLE TO NOTIFY DS=*did* SCHEDULER OF COMMUNICATION ERROR; R=*rc*, S=*sc*, M=*mc*

Explanation: IMS Connect is unable to notify the scheduler controller for the named datastore that a communication error has occurred. When this condition occurs, IMS Connect views the named datastore as active. However, messages queued for the datastore are not sent to it.

In the message text:

- *did* identifies the datastore.
- *rc* identifies the return code.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 32 on page 196 for an explanation of service and return codes.

Table 32. Service and Return Code Explanation

Service code	Short explanation	Return code	Meaning
COMMERR	Communi-cation error.	4	This is a processing error.

Module:

- DREC— HWSDREC0
- DXMT—HWSDXMT0

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: Issue the STOPDS command to terminate the datastore. If the error recurs, search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump if available.

HWSD0260I DS=*did tname* THREAD TERMINATED; M=*mc*

Explanation: The datastore transmit thread or receive thread has terminated.

In the message text:

- *did* identifies the datastore.
- *tname* identifies the thread type.
- *mc* identifies the module issuing the message.

Module:

- DREC— HWSDREC0
- DXMT—HWSDXMT0

System Action: This message is issued when a datastore thread has terminated.

HWSD0270I OTMA OPEN FAILED; R=*rc*, M=*mc*

Explanation: Communication with a datastore failed during IMS Connect startup or in response to an IMS Connect OPENDS command and resulted in the failure of the OTMA open function.

In the message text:

- *rc* identifies the return code.
- *mc* identifies the module issuing the message.

Module: DOC1— HWSDOC10

System Action: This message is issued when communication to OTMA fails due to a communications failure with a datastore. See message HWSO1105W on page 208 or message HWSO1110W on page 208 for additional information related to this failure.

System Programmer Response: This error can occur when the group and members of IMS OTMA are not correctly defined. Use the IMS Connect VIEWDS or VIEWHWS commands to view the status of the datastores in the system and determine which datastores were not able to be opened. If the problem persists, search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump if available.

HWSD0280I DATASTORE COMMUNICATION FUNCTION CLOSED; M=*mc*

Explanation: The communication facility for datastores has become inactive.

In the message text:

- *mc* identifies the module issuing the message.

Module: DOC3— HWSDOC30

System Action: This message is issued when all communications with the datastores have terminated and during IMS Connect shutdown.

HWSD0282I COMMUNICATION WITH DS=*did* CLOSED; M=*mc*

Explanation: Communication for the named datastore has terminated.

In the message text:

- *did* identifies the datastore.
- *mc* identifies the module issuing the message.

Module:

- DSCL — HWSDSCL0
- DREC — HWSDREC0

System Action:

HWSDSCL0
A CLOSEDS command has successfully completed.

HWSDREC0
The connection to the named datastore has terminated.

This message is issued when a CLOSEDS command has successfully completed.

HWSD0284I COMMUNICATION WITH DS=*did* STOPPED; M=*mc*

Explanation: Communication for the named datastore has stopped.

In the message text:

- *did* identifies the datastore.
- *mc* identifies the module issuing the message.

Module: DSCM— HWSDSCM0

System Action: This message is issued when a STOPDS command has successfully completed.

HWSD0286I COMMUNICATION WITH DS=*did* STOPPED DUE TO COMMUNICATION ERROR; M=*mc*

Explanation: Communication for the named datastore stops because of an error.

In the message text:

- *did* identifies the datastore.
- *mc* identifies the module issuing the message.

Module: DSCM— HWSDSCM0

System Action: This message is issued when a communication error occurs with a datastore. Stop (`/STOP OTMA`) and restart (`/START OTMA`) OTMA and then close (`CLOSEDS`) and reopen (`OPENDS`) the datastore.

HWSD0290I Connected to DATASTORE=*did*; M=*mc*

Explanation: Communication has been established with the named datastore.

In the message text:

- *did* identifies the datastore.
- *mc* identifies the module issuing the message.

Module:

- DSC1— HWSDSC10
- DREC — HWSDREC0

System Action:

HWSDSC10
A connection has been established with a datastore. This might occur during IMS Connect startup or at the successful completion of an `OPENDS` command.

HWSDREC0
A connection has been re-established with a datastore.

HWSD0292I CONNECTION TO DATASTORE=*did*; FAILED; M=*mc*

Explanation: Communication has not been established with the named datastore. The datastore has not joined the XCF group yet.

In the message text:

- *did* identifies the datastore.
- *mc* identifies the module issuing the message.

Module: DSC1 — HWSDSC10

System Action: This message is issued when a connection has not been established with a CONFIG file defined datastore. This will occur during IMS Connect startup.

HWSI1605W GETMAIN FOR OTOKEN AND REGISTRATION CONTROL BUFFER FAILED; R=*rc*, S=*sc*, M=*mc*

Explanation: Storage for the OTOKEN buffer could not be allocated.

- *rc* identifies the return code.
- *sc* identifies the service code. Service codes contain codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 33 for an explanation of service and return codes.

Table 33. Service and Return Code Explanation

Service code	Short Explanation	Return code	Meaning
GETOTOKEN	BPEGETM, the system service used to acquire the OTOKEN.	4	An incorrect or unsupported subpool is specified.
		8	A zero length is requested.
		12	Unable to obtain the requested storage (MVS GETMAIN failed).

Module: OMXR HWSOMXRG

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: This is probably a storage error. Ensure that the reason size for IMS Connect is large enough. If the error recurs, search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide JCL, SYSLOG, and dump if available.

HWSI1615W SCI FUNC=function, ERROR FOR IMSPLEX ENVIRONMENT; DS=*ipid*, R=*rc*, S=*sc*, M=*mc*

Explanation: The function of an SCI call terminated in error for the named IMSplex.

- *ipid* identifies the IMSplex .
- *rc* identifies the SCI return code.
- *sc* identifies the SCI service code. Service code contains codes that identify specific errors or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

Module:

- OXMT HWSOMXMT
- OMXRC HWSOMXRC

System Action: This message is issued when a transmit or receive to or from IMSplex occurs. The connection will be lost.

HWSI1618W SCI IS NOT EXECUTING, FOR IMSPLEX=*ipid*, R=*rc*, S=*sc*, M=*mc*

Explanation: The IMS command request sent to the IMS OM was rejected.

- *ipid* identifies the IMSplex
- *rc* identifies the return code
- *sc* identifies the service code. Service codes contain codes that identify specific errors or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 34 for an explanation of the service and return codes.

Table 34. Service and Return Code Explanation

Service code	Return code	Meaning
SCI Reason Code	X'01nnnnnn'	SCI return code.
OM Reason Code	X'02nnnnnn'	OM return code.
See *IMS Version 8: Common Service Layer Guide and Reference* for more information about SCI and OM return and reason codes.		

Module: OMXM HWSOMXMT

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: An SCI request has been rejected. The SCI has been terminated by means other than an IMS Connect `STOPIP` command. If the return code is X'01nnnnnn', then SCI needs to be restarted. If the return code is X'02nnnnnn', then OM needs to be restarted.

HWSI1619W OM IS NOT ACTIVE FOR IMSPLEX=*ipid*, R=*rc*, S=*sc*, M=*mc*

Explanation: The SCI interface has rejected the request. OM is not active.

- *ipid* identifies the IMSplex
- *rc* identifies the return code
- *sc* identifies the service code. Service codes contain codes that identify specific errors or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 35 for an explanation of service and return codes.

Table 35. Service and Return Code Explanation

Service code	Return code	Meaning
SCI Reason Code	X'01nnnnnn'	SCI return code.
OM Reason Code	X'02nnnnnn'	OM return code.
See *IMS Version 8: Common Service Layer Guide and Reference* for more information about SCI and OM Return and Reason codes.		

Module: OMXM HWSOMXMT

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: An SCI request has been rejected. OM has been terminated. If the return code is X'01nnnnnn', then SCI needs to be restarted. If the return codes is X'02nnnnnn', then OM needs to be restarted.

HWSI1620W COMMAND FAILURE: CMD CMD ERROR FOR IMSPLEX=*ipid*, R=*rc*, S=*sc*, M=*mc*

Explanation: The SCI request was rejected and the OM command structure that passed is invalid.

- *ipid* identifies the IMSplex
- *rc* identifies the return code
- *sc* identifies the service code. Service codes contain codes that identify specific errors or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 36 for an explanation of service and return codes.

Table 36. Service and Return Code Explanation

Service code	Return code	Meaning
SCI Reason Code.	X'01nnnnnn'	SCI return code.
OM Reason Code.	X'02nnnnnn'	OM return code.
See the *IMS Version 8: Common Service Layer Guide and Reference* for more information about SCI and OM Return and Reason codes.		

Module: OMXM HWSOMXMT

System Action: This message is issued and IMS Connects continues to run.

System Programmer Response: An SCI request has been rejected. OM has rejected the command. The command structure is invalid. Correct the command

structure and retry the command.

HWSI1705W GETMAIN FOR CTOKEN AND REGISTRATION CONTROL BUFFER FAILED; R=*rc*, S=*sc*, M=*mc*

Explanation: The storage buffer could not be allocated.

- *rc* identifies the return code.
- *sc* identifies the service code. Service codes contain codes that identify specific errors or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 37 for an explanation of service and return codes.

Table 37. Service and Return Code Explanation

Service code	Brief explanation	Return code	Meaning
GETCTOKN	BPEGETM, the system service used to acquire the CTOKEN failed.	4	An incorrect or unsupported subpool is specified or there is no storage available.

Module: OMXO HWSOMXOT

System Action: This messaged issued and IMS Connect continues to run.

System Programmer Response: This is probably a storage error. Ensure that the region size for IMS Connect is large enough. If the error recurs, search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide JCL, SYSLOG, and dump, if available.

HWSI1720W REGISTRATION TO SCI FAILED FOR IMSPLEX=*ipid*; R=*rc*, S=*sc*, M=*mc*

Explanation: IMS Connect attempt to register with the Structure Call Interface (SCI) has failed. This may be due to the fact that the SCI address space has not been started. As soon as SCI is started, the IMS Connect command `OPENIP` for the named IMSplex (ID=name that was specified in the configuration file) can be issued.

- *ipid* identifies the IMSplex .
- *rc* identifies the return code.
- *sc* identifies the service code. Service codes contain codes that identify specific errors or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 38 for an explanation of the service and return code.

Table 38. Service and Return Code Explanation

IMSplex name	Return code	Reason code
id name specified in the IMS Connect configuration file	See the IMS V8 library for SCI return and reason codes.	

Module: OMXO HWSOMXOT

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: See the IMS V9 library to determine the SCI reason for the registration failure.

HWSI1754W UNABLE TO NOTIFY IMSPLEX=*ipid*, SCHEDULER OF COMMUNICATION ERROR; R=*rc*, S=*sc*, M=*mc*

Explanation: IMS Connect is unable to obtain required storage to process the request, and is unable to notify the scheduler.

- *ipid* identifies the IMSplex .
- *rc* identifies the return code.
- *sc* identifies the service code. Service codes contain codes that identify specific errors or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 39 for an explanation of service and return codes.

Table 39. Service and Return Code Explanation

Service code	Short Explanation	Return code	Meaning
GETFWEB	BPECBGET, the system service used to acquire an FWE to notify all datastores to close.	4	An incorrect CBTE address is passed to the CB get routine. This is an internal system error.
		8	Storage is unavailable to satisfy the request.

Module: OMXM HWSOMXMT

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: This is probably a storage error. Ensure that the region size for IMS Connect is large enough. If the error recurs, search the

problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump if available.

HWSI1815W DEREGISTRATION FAILED FOR MEMBER=*member*; R=*rc*, S=*sc*, M=*mc*

Explanation: An attempt to deregister is unsuccessful.

- *member* identifies the IMS Connect IMSplex member name.
- *rc* identifies the return code.
- *sc* identifies the service code. Service code contains codes that identify specific errors or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

Module: OMXC HWSOMXCN

System Action: This message is issued and IMS Connects continues to run.

System Programmer Response: See the IMS V8 library for an explanation of the specified return code.

HWSI1816W THE SCI IS NOT AVAILABLE: MEMBER=*ipid*, STATE=*st*, M=*mc*

Explanation: The SCI address space has terminated.

- *ipid* identifies the IMSplex .
- *st* identifies the SCI state.
  - DISC Disconnected. The SCI address space was present; however, it has been terminated, either normally or abnormally.
- *mc* identifies the module issuing the message.

Module: OMXC HWSOMXCN

System Action: This message is issued and IMS Connects continues to run.

System Programmer Response: An SCI request has been rejected. The SCI has been terminated by means other than an IMS Connect `STOPIP` command. The SCI needs to be restarted.

HWSL0101I HWS CLEANUP SUCCESSFUL

Explanation: IMS Connect Local Option resource cleanup was successfully completed during termination.

Module: HWSRSM00

System Action: The message is issued and IMS Connect terminates.

HWSL0103I CLEANUP SUCCESSFUL: Client=*cccccccc*

Explanation: The IMS Connect resource manager successfully cleaned the interface storage in the client address space identified in *cccccccc*. This message is issued in the client address space. In the message text:

cccccccc
The client address space name. This name is typically the jobname of the web server where the client servlet is running.

Important: The client address space name is different from the Client ID used in the input or output of IMS Connect commands such as STOPCLNT and VIEWHWS.

Module: HWSRSM20

System Action: The message is issued and IMS Connect terminates.

HWSL0104W CLEANUP FAILED: CLIENT= *cccccccc*, RSN=*rrr*

Explanation: The IMS Connect resource manager encountered a problem while cleaning up the interface storage associated with the client in the client address space. The reason code identifies the problem. The message is issued in the client address space. In the message text:

cccccccc identifies the client address space name. This name is typically the job name of the web server (for example, IMWEBSRV) where the client servlet is running.

Important: the client address space is different from the Client ID that is used in the input or output of IMS Connect commands such as STOPCLNT and VIEWHWS.

rrr is one of the following reason codes:

- 104: A CGCT block was damaged.
- 108: The CCIB block was damaged.
- 10C: An error occurred when the CCIB storage was released.
- 110: A CRET block was damaged.
- 114: An error occurred when the storage for a CRET block was released.
- 118: HWSRSM20 abended for an unknown reason.
- 11C: An unknown error occurred.

Module: HWSRSM20

System Action: The message is issued, and IMS Connect terminates.

System Programmer Response: This error message indicates that CSA storage might not be available. Contact the IBM Support Center.

HWSL0105I INTF CLEANUP SUCCESSFUL: Client=*cccccccc*

Explanation: Before terminating, IMS Connect successfully posted or resumed all outstanding HWS requests from the Local Option client. In the message text:

cccccccc
The client address space name. This name is typically the jobname of the web server where the client servlet is running.

Important: The client address space name is different from the Client ID used in the input or output of IMS Connect commands such as STOPCLNT and VIEWHWS.

Module: HWSRSM10

System Action: The message is issued and IMS Connect terminates.

HWSL0106W INTF CLEANUP FAILED: CLIENT= *cccccccc*, **RSN=***rrr*

Explanation: When the IMS Connect address space terminated, the IMS Connect resource manager that was monitoring IMS Connect for the client failed during cleanup. The reason code identifies the problem that was encountered. In the message text:

cccccccc identifies the client address space name. This name is typically the job name of the web server (for example, IMWEBSRV) where the client servlet is running.

rrr is one of the following reason codes:
- 104: The resource manager could not obtain common storage for a CXSH block to notify the client that IMS Connect terminated.
- 108: The resource manager could not schedule an SRB to the client address space to notify the client that IMS Connect terminated.
- 10C: The resource manager could not schedule an SRB to the client address space to clean up the IMS connect interface blocks.
- 110: The resource manager (HWSRSM10) abended.

Module: HWSRSM10

System Action: The message is issued, and IMS Connect terminates.

System Programmer Response: If the client address space terminates before the IMS Connect resource manager completes processing, you might receive message HWS0106w with either reason code 108 or 10C. If you do, other IMS Connect resource managers have cleaned up IMS Connect interface storage, and no action is required. If you do not, then contact the IBM Support Center. If you receive reason code 110, print the records in SYS1.LOGREC for information on the abend. Provide the JCL, SYSLOG, and dump if available.

HWSL0111W HWS INTERFACE ABEND *abend_code* **PSW=***psw* **R15=***r15* **MODULE** *module_addr* **STATUS**

Explanation: An abend occurred in the interface between the client and IMS Connect during the processing of an IMS Connect request. In the message text:

abend_code
Identifies the abend that occurred (Sxxx for system abends and Uxxxx for user abends).

psw
Identifies the PSW (program status word) contents at the time of the abend.

r15
Identifies the contents of Register 15 at the time of the abend. For some abends, this value is the abend subcode.

module_addr
Identifies the name of the IMS Connect interface module that detected the abend. This value is not necessarily the module that abended, but the module whose recovery routine (ESTAE or FRR) was driven because of the abend. Possible modules are:

HWSREG20
The abend occurred during registration with IMS Connect.

HWSRQS00
The abend occurred on the input side of the interface, which sends the request to the IMS Connect address space.

HWSSRB00
The abend occurred on the output side of the interface, which returns the result of an HWS request from IMS Connect to the client.

Status
Status is a text string that indicates where the abend occurred. This information is not provided for all modules. For example, if the module is HWSREG20, status is blank. If the module is HWSRQS00 or HWSSRB00, status can have the following values:

BEFORE COPY
The abend occurred before the requested data was copied to the IMS Connect address space.

IN COPY
The abend occurred while the requested data was being copied to the IMS Connect address space. This abend occurs when bad data is passed from the client.

AFTER COPY
The abend occurred after the data is copied and queued to the IMS Connect address space.

STATUS UNKWN
The FRR could not determine the status of the request when the abend occurred.

HWSRQS00 provides this additional value:

IN ENQUEUE
The abend occurred when the request was queued to the IMS Connect address space.

HWSSRB00 provides this additional value:

IN POST
The abend occurred when the client was being posted to wake it after a request had completed.

Module:

- HWSREG20
- HWSRQS00
- HWSSRB00

System Action: The message is issued to the client application, and IMS Connect continues to run.

System Programmer Response: Save a copy of the dump product, and save or print a copy of the LOGREC records related to this abend. If the client is an IBM product, contact the IBM Support Center. If the client is not an IBM product, contact the supplier of the client.

HWSL0281I CONNECT REJECTED FOR CLIENT=*client*, USERID=*userid*; INSUFFICIENT AUTHORITY TO HWS ICON_NAME; RACROUTE AUTH R15=*r15*, RC=*rc*, RSN=*rsn*

Explanation: A client attempted to connect to IMS Connect using the local option but the client was not authorized to access IMS Connect. IMS Connect issues a RACROUTE REQUEST=AUTH call to determine if the connecting client has the appropriate authority to access IMS Connect using the local option. IMS Connect uses the job user ID of the client to perform the authorization. See the section titled “Defining IMS Connect Security” in *IMS Version 9: IMS Connect Guide and Reference*.

- *client* refers to the client ID that is attempting to connect.
- *userid* is the user ID associated with the address space of the client. If this field contains “NONE,” the client is running with no user ID specified.
- *icon_name* refers to the IMS Connect to which the client is trying to connect.
- *r15* refers to the value in register 15 from the RACROUTE call.
- *rc* refers to the RACF return code from the RACROUTE call.
- *rsn* refers to the RACF reason code from the RACROUTE call.

System Action: The connection request is rejected and the client is not allowed to access the requested IMS Connect.

System Programmer Response: If the indicated user should be allowed to access the requested IMS Connect, authorize the user to IMS Connect with at least RACF UPDATE authority. If the indicated user should not be allowed to access the requested IMS Connect, you should determine why the user is trying to connect to it and take appropriate action to protect against unauthorized or malicious access.

HWSM0500E FUNCTION WORK ELEMENT PROCESSING FAILURE, FUNC=*func*, R=*rc*, S=*sc*, M=*mc*

Explanation: The function work element (FWE) cannot be processed. The FWE requests work between and within the components. This structure contains the function and parameters that a service requires for processing.

- *func* identifies the function requested.
- *rc* identifies the return code.
- *sc* identifies the service code. Service codes contain codes that identify specific errors or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 40 for an explanation of the service and return code.

Table 40. Service and Return Code Explanation

Service code	Short explanation	Return code	Meaning
INVFUNC	The function requested in the FWE is incorrect.	4	This is a processing error.

Module:

- OOCC HWSOOC0
- OSCH HWSOSCH0
- DCVC HWSDCVC0

System Action: This message is issued and, if possible, the requester of the function is notified. Otherwise, the FWE is freed. In all cases, IMS Connect continues to run.

System Programmer Response: This is probably an internal error. Search the problem-reporting database to find a correction for the problem. I none exists, contact the IMS Support Center. Provide the JCL, SYSLOG, and dump, if available.

HWSM0502W FWE FUNCTION=*func* FAILED FOR IMSPLEX=*ipid*, COMMAND=*hwscmd* IN PROGRESS; M=*mc*

Explanation: The function *func* cannot be processed because the command identified by *hwscmd* is already being processed.

- *func* identifies the function requested.
- *ipid* identifies the IMSplex connection.
- *hwscmd* identifies the IMS Connect command in progress.
- *mc* identifies the module issuing the message.

Module: DSCM HWSDSCM0

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: The IMS Connect command is progress is terminating the IMSplex; therefore, any new function for that IMSplex cannot be processed.

HWSM0504W COMMAND=*hwscmd* FAILED FOR IMSPLEX=*ipid*, COMMAND=*prev_hwscmd* ALREADY IN PROGRESS; M=*mc*

Explanation: The IMS Connect command entered for the IMSplex, *hwscmd*, cannot be processed because a command for that IMSplex, *prev_hwscmd*, is already in progress.

- *hwscmd* identifies the IMS Connect command that was blocked by prev_hwscmd from being run.
- *ipid* identifies the IMSplex.
- *prev_hwscmd* identifies the IMS Connect command that is blocking *hwscmd* from running.
- *mc* identifies the module issuing the message.

Module: DSCM HWSDSCM0

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: The IMS Connect command in progress is terminating the IMSplex; therefore, any new commands cannot be processed. If the IMS Connect command (*hwscmd*) was CLOSEHWS, the IMS Connect terminates after processing of *prev_hwscmd* completes.

HWSM0510W STOPIP COMMAND FAILED DUE TO IMSPLEX IN DISCONNECT STATE; M=*mc*

Explanation: The `STOPIP` command was issued; however, the IMSplex connection is in a DISCONNECT state. Therefore, the `STOPIP` command cannot be processed. When the SCI address is restarted, IMS Connect will automatically reconnect to SCI. When the connection has been reestablished, the `STOPIP` command can be issued.

mc identifies the module issuing the message.

Module: OSCH HWSOSCH0

System Action: This message is issued and the `STOPIP` command is ignored.

System Programmer Response: The DISCONNECT state has the same effect as a STOPPED state. If the SCI address space is restarted, the connection will be reestablished. When the connection is reestablished, the `STOPIP` command can be issued.

HWSM0522W UNABLE TO START TRANSMIT/RECEIVE THREADS FOR IMSPLEX=*ipid*, R=*rc*, S=*sc*, M=*mc*

Explanation: Storage cannot be allocated for the transmit or receive thread structure, or the transmit thread or receive thread cannot be scheduled. A transmit thread and receive thread is allocated for each IMSplex that is defined for message transmission and reception.

- *ipid* identifies the IMSplex.
- *rc* identifies the return code.
- *sc* identifies the service code. Service codes contain codes that identify specific errors or codes returned by called services that failed request.
- *mc* identifies the module issuing the message.

See Table 41 for an explanation of service and return codes.

Table 41. Service and Return Code Explanation

Service Code	Short Explanation	Return code	Meaning
GETDSBB	BPECBGET, the system service used to acquire the IMSplex (DSB) for the transmit and receive threads. This is the execution block for a thread.	4	An incorrect CBTE address is passed to the CBGET routine. This is an internal error.
		8	Storage is unavailable to satisfy the request.
GETC01K	BPECBGET, the system service used to acquire the common 1024 byte (C01K) for the controller. The area is used as a work area.	4	An incorrect CBTE address is passed to the CBGET routine. This is an internal system error.

Table 41. Service and Return Code Explanation (continued)

Service Code	Short Explanation	Return code	Meaning
		8	Storage is unavailable to satisfy the request.
GETTWUB	BPECBGET, the system service used to acquire the thread work unit (TWU) for the transmit and receive threads.	4	An incorrect CBTE address is passed to the CBGET routine. This is an internal error.
		8	Storage is unavailable to satisfy the request.
SCHEDTWU	BPETHDCR, the system service used to schedule the scheduler controller thread.	4	An incorrect dispatcher work area is passed to the create thread routine.
		8	An incorrect TCB index value is passed on the TCBIDX parameter.
		12	A zero routine address is on the ROUTINE= parameter.

Table 41. Service and Return Code Explanation (continued)

Service Code	Short Explanation	Return code	Meaning
		16	An incorrect TCB table entry address is passed into the thread create routine. The BPETHDCR macro determines the TCBT address based on whether the parameter TCBTYPE, TCBIDX, or TCBDWA is specified. Ensure that this parameter is correctly coded.
		20	Unable to get storage for a thread control block (THCB) for the thread.
		24	Unable to get stack storage for the thread
		28	The initial post of the thread failed.

Module:

- DSC1 HWSDSC10
- DSCM HWSDSCM0

System Action: This message is issued and, IMS Connect continues to run without this IMSplex.

System Programmer Response: On the subsequent close and startup of IMS Connect, ensure that the region size of the JCL statement is large enough to accommodate the IMS Connect region. If the error recurs, search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump, if available.

HWSM0527W CLOSE FAILED FOR IMSPLEX=*ipid*; R=*rc*, S=*sc*, M=*mc*

Explanation: An attempt to close the named IMSplex is unsuccessful during IMS Connect shutdown.

- *ipid* identifies the IMSplex.
- *rc* identifies the return code.
- *sc* identifies the service code. Service codes contain codes that identify specific errors or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 42 for an explanation of service and return codes.

Table 42. Service and Return Code Explanation

Service code	Short explanation	Return code	Meaning
GETFWEB	BPECBGET, the system service used to acquire an FWE to notify all IMSplex to close.	4	An incorrect CBTE address is passed to the CBGET routine. This is an internal error.
		8	Storage is unavailable to satisfy the request.

Module: DOC3 HWSDOC30

System Action: This message is issued and, IMS Connect continues to run.

System Programmer Response: Storage cannot be allocated to notify the IMSplex to close. If the error recurs, search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump, if available.

HWSM0550W UNABLE TO NOTIFY MSG ORIGIN=*clientid* OF IMSPLEX COMMUNICATION ERROR; R=*rc*, S=*sc*, M=*mc*

Explanation: IMS Connect is unable to notify the TCP/IP client who originated the command message which is either being processed or queued for processing, that a communication error with IMS Operations Manager (OM) has occurred.

- *clientid* identifies the TCP/IP client.
- *rc* identifies the return code.
- *sc* identifies the service code. Service codes contain codes that identify specific errors or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 43 for an explanation of the service and return code.

Table 43. Service and Return Code Explanation

Service code	Short explanation	Return code	Meaning
COMMERR	Communi-cation error with the IMSplex	4	This is a processing error.

Module:

- OXMT HWSOXMT0
- DSC3 HWSDSC30
- DSCE HWSDSCE0

System Action: This message is issued and IMS Connect continues to run. The message whose processing caused the error is discarded.

System Programmer Response: This error occurs when the IMSplex is no longer active or the communication linkage to IMS Connect is broken.

HWSM0552W UNABLE TO SEND RESPONSE RECEIVED FROM IMSPLEX=*ipid* TO CLIENT=*clientid*; R=*rc*, S=*sc*, M=*mc*

Explanation: IMS Connect is unable to send the response received from the IMSplex to the required TCP/IP client.

- *ipid* identifies the IMSplex.
- *clientid* identifies the TCP/IP client.
- *rc* identifies the return code.
- *sc* identifies the service code. Service codes contain codes that identify specific errors or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 44 on page 206 for an explanation of service and return codes.

Table 44. Service and Return Code Explanation

Service code	Short explanation	Return code	Meaning
INVLDTOK	Invalid server token has been detected.	4	Use the correct server token for the exchange of the command and command response.
NFNDCOMP	The component that handles the requested function cannot be found. An IMS Connect component issues an interface call for another component's service and the requested component cannot be located	4	This is a processing error.
NFNDFUNC	The requested function cannot be found. An IMS Connect component issues an interface call for another component's service and the requested service cannot be located.	4	This is a processing error.
NFNDSVT	The server table cannot be found. This table maintains the activity of a connected IMS Connect client.	4	This is a processing error.

Module: OREC HWSOREC0

System Action: This message is issued and IMS Connect continues to run. The response message is discarded.

System Programmer Response: This error occurs when the client is no longer active and is not connected to IMS Connect. If the service code is NFNDCOMP or NFNDFUNC, this is probably an internal error. Search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump, if available.

HWSM0554W UNABLE TO NOTIFY IMSPLEX=*ipid* SCHEDULER OF COMMUNICATION ERROR; R=*rc*, S=*sc*, M=*mc*

Explanation: IMS Connect is unable to notify the scheduler controller for the named IMSplex that a communication error has occurred. When this condition occurs, IMS Connect views the named IMSplex as active. However, messages queued for the IMSplex are not sent.

- *ipid* identifies the IMSplex.
- *rc* identifies the return code.
- *sc* identifies the service code. Service codes contain codes that identify specific errors or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 45 for an explanation of the service and return code.

Table 45. Service and Return Code Explanation

Service code	Short explanation	Return code	Meaning
COMMERR	Communi-cation error with the IMSplex.	4	This is a processing error.

Module:

- OREC HWSOREC0
- OXMT HWSOXMT

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: Issue the `STOPIP` command to terminate the IMSplex. If the error recurs, search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump, if available.

HWSM0560I IMSPLEX=*ipid* THREAD TERMINATED; M=*mc*

Explanation: The IMSplex transmit thread or receive thread has terminated.

- *ipid* identifies the IMSplex
- *mc* identifies the module issuing the message

Module:

- OREC HWSOREC0
- OXMT HWSOXMT0

System Action: This message is issued when the IMSplex thread has terminated.

HWSM0570W IMSPLEX OPEN FAILED; R=*rc*, M=*mc*

Explanation: Communication with the IMSplex failed during IMS Connect startup or in response to an IMS Connect `OPENIP` command and resulted in the failure of the IMSplex open function.

- *rc* identifies the return code.
- *mc* identifies the module issuing the message.

Module: OOC1 HWSOOC10

System Action: This message is issued when communication to IMSplex fails due to a communications failure with the IMSplex. See message HWSI1605W on page 197 for additional information related to this failure.

System Programmer Response: This error can occur when IMSplex is not correctly defined. Use `VIEWIP` or `VIEWHWS` commands to view the status of the IMSplex. If the problem persists, search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump, if available.

HWSM0580I IMSPLEX COMMUNICATION FUNCTION CLOSED; M=*mc*

Explanation: The communication facility for IMSplex has become inactive.

- *mc* identifies the module issuing the message.

Module: DOC3 HWSDOC30

System Action: This message is issued when all communications with the IMSplex have terminated and during IMS Connect shutdown.

HWSM0582I COMMUNICATION WITH IMSPLEX=*ipid* CLOSED; M=*mc*

Explanation: Communication for the named IMSplex has terminated.

- *mc* identifies the module issuing the message.

Module: DSCL HWSDSCL0

System Action: This message is issued when the `CLOSEIP` command has successfully completed.

HWSM0584 COMMUNICATION WITH IMSPLEX=*ipid* STOPPED; M=*mc*

Explanation: Communication for the named IMSplex has stopped.

- *ipid* identifies the IMSplex
- *mc* identifies the module issuing the message.

Module: DSCM HWSDSCM0

System Action: This message is issued when a `STOPIP` command has successfully completed.

System Programmer Response:

HWSM0590I CONNECTED TO IMSPLEX=*ipid*; M=*mc*

Explanation: Communication has been established with the named IMSplex.

Module: OSC10 HWSOSC10

System Action: This message is issued when a connection has been established with the IMSplex. This might occur during IMS Connect startup or at the successful completion of an `OPENIP` command.

HWSO1100W FAILED TO OBTAIN FREE STORAGE; R=*rc*, B=*bn*, M=*mc*

Explanation: The IMS Connect OTMA driver is unable to get free storage for internal buffers.

- *rc* identifies the return code.
- *bn* identifies the buffer name.
- *mc* identifies the module issuing the message.

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: This error can occur when not enough storage is available to complete the process. If the problem persists, search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump if available.

HWSO110W FAILED TO RELEASE STORAGE; R=*rc*, B=*bn*, M=*mc*

Explanation: The IMS Connect OTMA driver is unable to release storage for internal buffers.

In the message text:

- *rc* identifies the return code.
- *bn* identifies the buffer name.
- *mc* identifies the module issuing the message.

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: This is probably an internal error. Search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump if available.

HWSO1105W GETMAIN FOR OTOKEN + IXCQUERY CONTROL BUFFER FAILED; R=*rc*, S=*sc*, M=*mc*

Explanation: Storage for the OTOKEN buffer could not be allocated.

In the message text:

- *rc* identifies the return code.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 46 for an explanation of service and return codes.

Table 46. Service and Return Code Explanation

Service code	Short explanation	Return code	Meaning
GETOTOKN	BPEGETM, the system service used to acquire the OTOKEN.	4	An incorrect or unsupported subpool is specified.
		8	A zero length is requested.
		12	Unable to obtain the requested storage (MVS GETMAIN failed).

Module:

- DDXR— HWSDDXRG

System Programmer Response: This is probably a storage error. Ensure that the region size for IMS Connect is large enough. If the error recurs, search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump if available.

HWSO1110W IXCQUERY FAILED FOR OTMA SYSPLEX ENVIRONMENT; R=*rc*, S=*sc*, M=*mc*

Explanation: An attempt to query OTMA sysplex environment information (REQINFO=SYSPLEX) is unsuccessful.

In the message text:

- *rc* identifies the return code.
- *sc* identifies the reason code.
- *mc* identifies the module issuing the message.

Return codes (decimal): See *MVS/ESA SP Authorized Assembler Reference*.

Reason codes (decimal): See *MVS/ESA SP Authorized Assembler Reference*.

Module:

- DDXR— HWSDDXRG

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: See *MVS/ESA SP Authorized Assembler Reference* and take appropriate action.

HWSO1115W XCF FUNC=*function*, ERROR FOR OTMA SYSPLEX ENVIRONMENT; DS=*did*, R=*rc*, S=*sc*, M=*mc*

Explanation: The function on a XCF call terminated in error for the named datastore.

In the message text:

- *function* identifies the function (Transmit or Receive).
- *rc* identifies the XCF return code.
- *sc* identifies the XCF reason code.
- *mc* identifies the module issuing the message.

Module:

- DXMT— HWSDDXMT
- DXRC— HWSDDXRC

System Action: This message is issued when a transmit or receive to or from IMS occurs. The connection will be lost.

HWSO1205W GETMAIN FOR CTOKEN + IXCJOIN CONTROL BUFFER FAILED; R=*rc*, S=*sc*, M=*mc*

Explanation: Storage for the CTOKEN + IXCJOIN buffer could not be allocated.

In the message text:

- *rc* identifies the return code.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 47 on page 209 for an explanation of service and return codes.

Table 47. Service and Return Code Explanation

Service code	Short explanation	Return code	Meaning
GETCTOKN	BPEGETM, the system service used to acquire the CTOKEN.	4	An incorrect or unsupported subpool is specified.
		8	A zero length is requested.
		12	Unable to obtain the requested storage (MVS GETMAIN failed).

Module:

- DDXO— HWSDDXOT

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: This is probably a storage error. Ensure that the region size for IMS Connect is large enough. If the error recurs, search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump if available.

HWSO1210W IXCQUERY FAILED FOR GROUP=*group*, MEMBER=*tmember*; R=*rc*, S=*sc*, M=*mc*

Explanation: An attempt to query OTMA group information (REQINFO=GROUP) is unsuccessful.

In the message text:

- *group* identifies the XCF group name.
- *tmember* identifies the IMSs XCF target member name.
- *rc* identifies the return code.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 48 for an explanation of the service and return code,

Table 48. Service and Return Code Explanation

Group name	Member name	Return code	Reason code
XCF group name	IMS XCF member name	See *OS/390 MVS Programming Sysplex Service Reference* manual.	

Module:

- DDXO— HWSDDXOT

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: See *MVS/ESA SP Authorized Assembler Reference* and take the appropriate action.

HWSO1215W XCF GROUP=*group*, MEMBER=*tmember* IS NOT ACTIVE; R=*rc*, S=*sc*, M=*mc*

Explanation: The target XCF member is not active.

In the message text:

- *group* identifies the XCF group name.
- *tmember* identifies the IMSs XCF target member name.
- *rc* identifies the return code.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 49 for an explanation of the service and return code.

Table 49. Service and Return Code Explanation

Group name	Member name	Service code	Return code	Meaning
XCF group name	IMS XCF member name	NOTACTV	4	The target member is not active.

Module:

- DDXO— HWSDDXOT

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: Check the status of the target member and restart the target member.

HWSO1220W IXCJOIN FAILED FOR GROUP=*group*, MEMBER=*member*; R=*rc*, S=*sc*, M=*mc*

Explanation: An attempt to join the XCF group is unsuccessful.

In the message text:

- *group* identifies the XCF group name.
- *member* identifies IMS Connect's XCF member name.
- *rc* identifies the return code.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 50 for an explanation of the service and return code.

Table 50. Service and Return Code Explanation

Group name	Member name	Return code	Reason code
XCF group name	IMS Connect's XCF member name	See *OS/390 MVS Programming Sysplex Service Reference* manual.	

Module:

- DDXO— HWSDDXOT

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: See *MVS/ESA SP Authorized Assembler Reference* and take the appropriate action.

HWSO1305W CBGET FOR C512 BLOCK FAILED; R=*rc*, S=*sc*, M=*mc*

Explanation: Storage for the client bid buffer cannot be allocated.

In the message text:

- *rc* identifies the return code.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 51 for an explanation of return and service codes.

Table 51. Service and Return Code Explanation

Service code	Short explanation	Return code	Meaning
GETC512	BPECBGET, the system service used to acquire C512.	4	An incorrect CBTE address is passed to the CB get routine. This is an internal system error.
		8	Storage is unavailable to satisfy the request.

Module:

- DDXC— HWSDDXC

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: This is probably a storage error. Ensure that the region size for IMS Connect is large enough. If the error recurs, search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump if available.

HWSO1310W IXCMSGO FAILED FOR CLIENT BID GROUP=*group*, MEMBER=*member*; R=*rc*, S=*sc*, M=*mc*

Explanation: An attempt to send a client bid to IMS OTMA is unsuccessful.

In the message text:

- *group* identifies the XCF group name.
- *member* identifies the IMS Connect's XCF member name.
- *rc* identifies the return code.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 52 on page 211 for an explanation of the return and reason code.

Table 52. Return and Reason Code Explanation

Group name	Member name	Return code	Reason code
XCF group name	IMS Connect's XCF member name	See *OS/390 MVS Programming Sysplex Service Reference* manual.	

Module:

- DDXC— HWSDDXCN

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: See *MVS/ESA SP Authorized Assembler Reference* for the possible cause of the specified return and reason codes.

HWSO1315W IXCLEAVE FAILED FOR GROUP=*group*, MEMBER=*member*; R=*rc*, S=*sc*, M=*mc*

Explanation: An attempt to leave the XCF group is unsuccessful.

In the message text:

- *group* identifies the XCF group name.
- *member* identifies the IMS Connect's XCF member name.
- *rc* identifies the return code.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 53 for an explanation of the return and reason code.

Table 53. Return and Reason Code Explanation

Group name	Member name	Return code	Reason code
XCF group name	IMS Connect's XCF member name	See *OS/390 MVS Programming Sysplex Service Reference*	

Module:

- DDXC— HWSDDXCN

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: See *MVS/ESA SP Authorized Assembler Reference* for the possible cause of the specified return and reason codes.

HWSO1320W CLIENT BID FAILED FOR GROUP=*group*, MEMBER=*member*; R=*rc*, S=*sc*, M=*mc*

Explanation: A client bid with IMS OTMA is unsuccessful.

In the message text:

- *group* identifies the XCF group name.
- *member* identifies the IMS Connect's XCF member name.
- *rc* identifies the return code.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 54 for an explanation of the service and return code.

Table 54. Service and Return Code Explanation

Group name	Member name	Return code	Meaning
XCF group name	IMS Connect's XCF member name	See *IMS Version 9: Open Transaction Manager Access Guide and Reference*	This is a client bid error

Module:

- DDXC— HWSDDXCN

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: See the *IMS Version 9: Open Transaction Manager Access Guide and Reference* for the possible cause of the specified return code.

HWSO1325W RACFOUTE REQUEST=TOKENXTR FAILED FOR R=*rc*, S=*sc*, M=*mc*

Explanation: An attempt to extract a utoken for IMS Connect ASID is unsuccessful.

In the message text:

- *rc* identifies the SAF return code. See the RACROUTE macro reference for MVS for more information.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

Return codes (decimal): See the RACROUTE macro reference for MVS.

Reason codes (decimal): See the RACROUTE macro reference for MVS.

Module:

- DDXC— HWSDDXCN

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: See the RACROUTE macro reference for MVS for the possible cause of the specified return and reason codes.

HWSP1400W IPV6 PROCESSING NOT ENABLED; FUNC=*fn*, R=*rc*, S=*sc*, M=*mc*

Explanation: IMS Connect is unable to get the IPv6 socket.

In the message text:

- *fn* identifies the function code.
- *rc* identifies the return code.
- *sc* identifies the service code. Service codes contain either codes that specifically identify the error or codes returned by called services which failed to complete the request.
- *mc* identifies the module issuing the message.

System Action: This message is issued and IMS Connect continues to run with IPv4 support.

System Programmer Response: Ensure that the requirement for z/OS R1V4 is met and enable the TCP/IP stack for IPv6 processing by tailoring the BPXPRMxx member. See the section titled “Enabling Support for Internet Protocol Version 6” in *IMS Version 9: IMS Connect Guide and Reference* for more information.

HWSP1402W SSL PROCESSING NOT ENABLED; FUNC=*fn*, R=*rc*, S=*sc*, M=*mc*

Explanation: IMS Connect is unable to retrieve SSL support.

In the message text:

- *fn* identifies the function code.
- *rc* identifies the return code.
- *sc* identifies the service code. Service codes contain either codes that specifically identify the error or codes returned by called services which failed to complete the request.
- *mc* identifies the module issuing the message.

Module: HWSDOPN0

System Action: This message is issued. The SSL socket is closed. IMS Connect continues to run fully. If the message occurred during the SSL environment initialization, the port may be closed.

System Programmer Response: Ensure that the requirement for z/OS V1.4 is met.

HWSP1405W FAILED TO OBTAIN FREE STORAGE; R=*rc*, B=*bn*, M=*mc*

Explanation: The IMS Connect OTMA driver is unable to get free storage for internal buffers.

In the message text:

- *rc* identifies the return code returned by MVS for an MVS GETMAIN failure.
- *bn* identifies the buffer name.
- *mc* identifies the module issuing the message.

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: This error can occur when not enough storage is available to complete the process. If the problem persists, search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump if available.

HWSP1410W FAILED TO RELEASE STORAGE; R=*rc*, B=*bn*, M=*mc*

Explanation: The IMS Connect OTMA driver is unable to release storage for internal buffers.

In the message text:

- *rc* identifies the return code returned by MVS for an MVS GETMAIN failure.
- *bn* identifies the buffer name.
- *mc* identifies the module issuing the message.

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: This is probably an internal error. Search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump if available.

HWSP1415E HWSP1415E: TCP/IP SOCKET FUNCTION CALL FAILED; F=*fn*, R=*rc*, E=*ec*, M=*mc*

Explanation: The IMS Connect TCP/IP driver is unable to perform the specified socket function. HWSP1415E is issued during normal execution of IMS Connect. HWSP1415I is issued during shutdown of IMS Connect.

In the message text:

- *fn* identifies the TCP/IP socket function call.
- *rc* identifies the TCP/IP return code.
- *ec* identifies the TCP/IP error code.

- *mc* identifies the module issuing the message.

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: For the possible cause of the specified return code and error code, see *TCP/IP Application Programming Interface Reference*.

HWSP1415I HWSP1415I: TCP/IP SOCKET FUNCTION CALL FAILED; F=*fn*, R=*rc*, E=*ec*, M=*mc*

Explanation: The IMS Connect TCP/IP driver is unable to perform the specified socket function. HWSP1415E is issued during normal execution of IMS Connect. HWSP1415I is issued during shutdown of IMS Connect.

In the message text:

- *fn* identifies the TCP/IP socket function call.
- *rc* identifies the TCP/IP return code.
- *ec* identifies the TCP/IP error code.
- *mc* identifies the module issuing the message.

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: For the possible cause of the specified return code and error code, see *TCP/IP Application Programming Interface Reference*.

HWSP1420E PORT NUMBER CONTAINS NON-NUMERIC VALUE; P=*portid*, M=*mc*

Explanation: The IMS Connect TCP/IP driver is unable to convert the *portid* character string to a numeric value.

In the message text:

- *portid* identifies the port id character string in the `PORT` substatement of the `TCPIP` statement in the IMS Connect configuration member, `HWSCFGxx`.
- *mc* identifies the module issuing the message.

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: Check the `PORT` substatement of the `TCPIP` statement in the IMS Connect configuration member, `HWSCFGxx`, for the correct numeric characters. Correct the problem and restart IMS Connect.

HWSP1425E WAIT ECB FAILED; F=*fn*, C=*pc*, M=*mc*

Explanation: The IMS Connect TCP/IP driver is informed of an unsuccessful post code.

In the message text:

- *fn* identifies the function performed.
- *pc* identifies the post code set by IMS Connect.
- *mc* identifies the module issuing the message.

Module:

- HWSSDOTD
- HWSSDCON
- HWSSDDSC
- HWSSDRCV
- HWSSDTTD
- HWSSDXMT

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: Check the post code for the possible cause. For the post code, see the section titled “IMS Connect Post Codes” in *IMS Version 9: IMS Connect Guide and Reference*. This error is probably an internal error. Search the problem reporting database to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump, if available.

HWSP1426E WAIT ECB FAILED; F=*fn*, C=*pc*, M=*mc*

Explanation: An invalid post code was returned to IMS Connect.

In the message text:

- *fn* identifies the function performed.
- *pc* identifies the post code set by IMS Connect.
- *mc* identifies the module issuing the message.

Module:

- - HWSSDOTD

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: Check the post code for the possible cause. For the post code, see the section titled “IMS Connect Post Codes” in *IMS Version 9: IMS Connect Guide and Reference*.

HWSP1430E TCP/IP INTERNAL ERROR; F=*fn*, R=*rc*, E=*ec*, M=*mc*

Explanation: TCP/IP is unable to perform the specified socket function.

In the message text:

- *fn* identifies the TCP/IP socket function call.
- *rc* identifies the TCP/IP return code.
- *ec* identifies the TCP/IP error code.
- *mc* identifies the module issuing the message.

Module:

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: For the possible cause of the specified return code and error code, see

TCP/IP Application Programming Interface Reference.

HWSP1435E SOCKET CLOSED; REQUEST MESSAGE INCOMPLETE; M=*mc*

Explanation: The TCP/IP socket closes before all the data has been received.

In the message text:

- *mc* identifies the module issuing the message.

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: None. The connection has been terminated by the client code, and IMS Connect has received either no data or partial data from the client. This error can occur if you specified a TCP/IP value of SO_LINGER=Y,VALUE=0 or SO_LINGER=NO. Instead, specify SO_LINGER=Y,VALUE=10. The VALUE parameter should be any value other than 0. See *TCP/IP Application Programming Interface Reference* for more information on SO_LINGER= and VALUE=. The request message is discarded.

HWSP1440E INVALID LENGTH SPECIFIED IN MESSAGE PREFIX; L=*ll*, M=*mc*

Explanation: The length field in the message prefix contains an invalid value. A valid message length value is between 12 and 10,000,000 inclusive, and it must be equal to the exact data being sent.

In the message text:

- *ll* identifies the length specified in the message prefix. This is the length of the entire message including the 12-byte message prefix.
- *mc* identifies the module issuing the message.

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: None. The request message is discarded.

HWSP1445E UNKNOWN EXIT IDENTIFIER SPECIFIED IN MESSAGE PREFIX; MSGID=*msgid1/msgid2*, M=*mc*

Explanation: The MSGID identifier in the message prefix contains an unknown identifier. Exit identifiers are given to IMS Connect in the `INIT` subroutine of the user exit.

In the message text:

- *msgid1* identifies the EBCDIC `MSGID` in the message prefix.
- *msgid2* identifies the ASCII `MSGID` in the message prefix.
- *mc* identifies the module issuing the message.

If *msgid1* and *msgid2* are both unreadable, then one of the following may have occurred:

1. The message was built incorrectly. The IRM_ID of the message is incorrect or missing.
2. The message was sent on a client-defined Secure Socket Layer (SSL) port; however the port was not defined to IMS Connect as an SSL port.

If the *msgid1* or *msgid2* is partially readable, it may mean the message was built incorrectly and the IRM_ID field contains only part of the ID. For example:

- If 4 extra bytes precede IRM_ID, you may receive one of the following messages:

  ```
  HWSP1445E Unknown EXIT identifier specified in
  message prefix; MSGID=)($%*SAM/+_{}|":^
  ```

  ```
  HWSP1445E Unknown EXIT identifier specified in
  message prefix; MSGID=^+_{}|":/)($%*SAM
  ```

- If 4 bytes are missing in front of IRM_ID, you may receive one of the following messages:

  ```
  HWSP1445E Unknown EXIT identifier specified in
  message prefix; MSGID=PLE*)($%/+_{}|":^
  ```

  ```
  HWSP1445E Unknown EXIT identifier specified in
  message prefix; MSGID=^+_{}|"/PLE*)($%
  ```

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: None. The request message is discarded.

HWSP1450E MESSAGE CONTAINS INVALID LENGTH; SEG_NO=*sn*, APP_LL=*al*, TOTAL MSG LEN=*tl*, EXPECTED MSG LEN=*el*, C=*clientid*, M=*mc*

Explanation: The input OTMA message contains an incorrect application data length.

In the message text:

- *sn* identifies the OTMA segment number.
- *al* identifies the application data length in the OTMA segment.
- *tl* identifies the length of the total message specified.
- *el* identifies the length of the expected message.
- *clientid* identifies the client name. It will contain blanks if the client name is not available.
- *mc* identifies the module issuing the message.

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: None. The request message is discarded.

HWSP1455E MESSAGE CONTAINS INVALID LENGTH; AREA_LL=*ar*, APP_LL=*al*, M=*mc*

Explanation: The input OTMA message contains an incorrect application data length.

In the message text:

- *ar* identifies the internal buffer length.
- *al* identifies the application data length in the OTMA segment.
- *mc* identifies the module issuing the message.

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: None. The request message is discarded. This is an IMS Connect/IMS internal error. Contact the IBM Support Center. Provide the JCL, SYSLOG, and dump if available.

HWSP1460E MISSING FIC IN OTMA PREFIX; M=*mc*

Explanation: The input OTMA message does not contain a first-in-chain (FIC) flag in the first segment.

In the message text:

- *mc* identifies the module issuing the message.

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: None. The request message is discarded.

HWSP1465E MISSING LIC IN OTMA PREFIX; SEG_NO=*sn*, **M=***mc*

Explanation: The input OTMA message does not contain a last-in-chain (LIC) flag in the last segment.

In the message text:

- *sn* identifies the number of the segment.
- *mc* identifies the module issuing the message.

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: None. The request message is discarded.

HWSP1470E LOADING EXIT FAILED; EXIT=*msgid*, **R=***rc*, **M=***mc*

Explanation: IMS Connect failed to load the user exit.

In the message text:

- *msgid* identifies the `MSGID` (exit name) in the message prefix.
- *rc* identifies the return code returned by MVS from an MVS load failure.
- *mc* identifies the module issuing the message.

System Action: This message is issued for each user exit that fails to load. If at least one user exit loads correctly, IMS Connect continues to run. However, the exits that failed to load will not be available to IMS Connect.

If all user exits fail to load, IMS Connect continues to run but no TCP/IP communication is established (see HWSS0785W on page 226).

System Programmer Response: If TCP/IP communication failed to establish because none of the exits returned a valid return code, run `CLOSEHWS` to terminate IMS Connect.

Examine the return code and resolve the problem and then restart IMS Connect to reload the exit or exits.

HWSP1475E EXIT EXECUTION FAILED; EXIT=*msgid*, **F=***fn*, **R=***rc*, **M=***mc*

Explanation: A user exit returns an incorrect return code to IMS Connect when called by IMS Connect to perform an INIT or TERM function.

In the message text:

- *msgid* identifies the `MSGID` (exit name) in the message prefix.
- *fn* identifies the function failed.
- *rc* identifies the return code returned by MVS from an MVS load failure.
- *mc* identifies the module issuing the message.

System Action: This message is issued for each user exit that returns an incorrect return code. If at least one exit returns a valid return code, IMS Connect continues to run. However, the exits that failed will not be available to IMS Connect.

If all exits return an invalid return code, IMS Connect continues to run but no TCP/IP connection is established (see HWSS0785W on page 226).

System Programmer Response: Pass the return code and function name to the exit owner to resolve the problem.

If TCP/IP communication is not established because none of the exits returned a valid return code, run `CLOSEHWS` to terminate IMS Connect.

HWSP1480E CONFLICT IDENTIFIERS RETURNED FROM EXIT; EXIT1=*en1*, **EXIT2=***en2*, **M=***mc*

Explanation: Multiple user exits that use the same exit name are defined in the `EXIT` substatement of the `TCPIP` statement in the `HWSCFGxx` configuration member.

In the message text:

- *en1* identifies the first exit name.
- *en2* identifies the second exit name.
- *mc* identifies the module issuing the message.

System Action: This message is issued and IMS Connect continues to run, but none of the TCP/IP communication facilities will work properly.

System Programmer Response: Have the owner of EXIT1 and EXIT2 resolve the naming problem, correct the exit names in the `EXIT` substatement in `HWSCFGxx`,

and then shut down and restart IMS Connect.

HWSP1485E PASSING TO TCP/IP ASYNC FAILED; F=*fn*, R=*rc*, E=*ec*, M=*mc*

Explanation: TCP/IP rejects the request for asynchronous function processing.

In the message text:

- *fn* identifies the TCP/IP socket function call.
- *rc* identifies the TCP/IP return code.
- *ec* identifies the TCP/IP error code.
- *mc* identifies the module issuing the message.

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: For the possible cause of the specified return and error codes, see *TCP/IP Application Programming Interface Reference*.

HWSP1490E INVALID OTMA SEQUENCE NUMBER; Seg=*gn*, SEQ=*qn*, C=*cn*, M=*mc*

Explanation: A request message coming from a client or generated by a user exit contains an invalid sequence number in the OTMA prefix. The sequence number must match the segment number.

In the message text:

- *gn* identifies the segment number.
- *qn* identifies the sequence number.
- *cn* identifies the client name. It will contain blanks if the client name is not available.
- *mc* identifies the module issuing the message.

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: None. The request message is discarded.

HWSP1495E PROTOCOL VIOLATION; R=*rc*, C=*cn*, M=*mc*

Explanation: IMS Connect received the input message while waiting for the response ACK/NAK.

In the message text:

- *rc* identifies the return code.
- *cn* identifies the client name. It will contain blanks if the client name is not available.
- *mc* identifies the module issuing the message.

Module:

- SDRC — HWSSDRCV

System Action: This message is issued and IMS Connect sends the NAK to IMS.

System Programmer Response: None. The request message is rejected.

HWSP1500E SECURITY VIOLATION; R=*rc*, C=*cn*, RACFRC=*rrc,* RACFS=*rrs*, M=*mc*

Explanation: An attempt to RACF user identification and verification for the request message coming from a client or generated by a user exit routine contains the password and user ID in the OTMA prefix user data section.

In the message text:

- *rc* identifies the SAF return code.
- *cn* identifies the client name. It will contain blanks if the client name is not available.
- *rrc* identifies the RACF return code.
- *rrs* identifies the RACF reason code.
- *mc* identifies the module issuing the message.

Return codes (decimal): See the RACROUTE REQUEST=VERIFY macro reference for MVS for R=*rc*, RACFRC=*rrc*, and RACFS=*rrs* values.

Module:

- SDRC — HWSSDRCV

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: None. The request message is rejected.

HSWP1503E SECURITY VIOLATION, NO RACROUTE CALL; R=*rc*, C=*clientid*, M=*SDRC*

Explanation: IMS Connect rejected the security input data of the user ID and/or the password. RACF=Y had been specified, however, no user ID and/or password was passed to IMS Connect by the user-written exit.

In the message text:

- *rc* identifies the return code from IMS Connect.
  - 255 - No OTMA security header; IMS Connect security checking cannot be done.
  - 252 - Invalid security header length. The security header length is less than X'6A', security parameters are missing.
  - 248 - No password (see note 1 below).
  - 244 - No user ID (see note 2 below).
  - 242 - Invalid character detected in user ID, groupname, or password field.
  - 240 - No password and no user ID (see note 3 below).
- *clientid* identifies the client ID.
- *SDRC* identifies the module issuing the error message.

Notes:

1. There is no password in IRM, but there is a user ID in IRM. Or, there is no password or user ID in IRM; however, there is a default user ID in the IMS Connect configuration file.
2. There is no user ID in IRM and there is no default user ID in the IMS Connect configuration file.
3. There is no password or user ID in IRM and there is no default user ID in the IMS Connect configuration file.

Module:

- SDRC — HWSSDRCV

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: None. The request message is rejected.

HWSP1505E NEGATIVE SEGMENT LEN; SEG LEN=*1111*, R=*rc*, M=*mc*

Explanation: One of the data segments contains an invalid segment length; the length is negative.

In the message text:

- *1111* identifies the length value in the message segment.
- *rc* identifies the XCF return code.
- *mc* identifies the module issuing the message.

Module:

- DRCV — HWSSDRCV

System Action: This message is issued when a negative segment length is received from the client. The connection is closed.

System Programmer Response: None. The request message is rejected.

HWSR0653I PROTECTED CONVERSATION PROCESSING WITH RRS/MVS ENABLED M=*mc*

Explanation: An attempt to communicate and restart with RRS is successful.

Module: RRSI - HWSRRSI0

System Action: The message is issued and IMS Connect continues to run.

HWSR0698W PROTECTED CONVERSATION PROCESSING NOT ENABLED FUNC=*fn*; R=*rc*, S=*sc*, M=*mc*

Explanation: An attempt to communicate with RRS is unsuccessful.

In the message text:

- *fn* identifies the RRS call that was issued.
- *rc* identifies the RRS return code.
- *sc* identifies the RRS reason code.
- *mc* identifies the module issuing the message.

Module: RRSI - HWSRRSI0

System Action: The message is issued and IMS Connect continues to run.

System Programmer Response: Ensure that RRS was brought up correctly. If the error recurs, search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump, if available.

HWSR0800E FUNCTION WORK ELEMENT PROCESSING FAILURE, FUNC=*func*; R=*rc*, S=*sc*, M=*mc*

Explanation: The function work element (FWE) cannot be processed. The FWE requests work between components and within components. This structure contains the function and parameters that a service requires for processing.

In the message text:

- *func* identifies the function requested.
- *rc* identifies the return code.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 55 for an explanation of the service and return code.

Table 55. Service and Return Code Explanation

Service code	Short explanation	Return code	Meaning
INVFUNC	The function requested in the FWE is incorrect.	4	This is a processing error.

Module:

- HWSRCDR0

System Action: This message is issued and, if possible, the requestor of the function is notified. Otherwise, the FWE is freed. In all cases, IMS Connect continues to run.

System Programmer Response: This is probably an internal error. Search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump if available.

HWSR0810E STORAGE ALLOCATE FAILED FOR RECORDER DCB; R=*rc*, S=*sc,* M=*mc*

Explanation: Storage allocation failed for recorder.

In the message text:

- *rc* identifies the return code.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 56 for an explanation of service and return codes.

Table 56. Service and Return Code Explanation

Service code	Short explanation	Return code	Meaning
GETDCB	BPEGETM, the system service used to acquire the CTOKEN.	4	An incorrect or unsupported subpool is specified.
		8	A zero length is requested.
		12	Unable to obtain the requested storage (MVS GETMAIN failed).

Module:

- HWSRCDR0

System Action: The system continues to operate, however, no logging of input or output messages will occur.

System Programmer Response: More storage is required for the execution of the IMS Connect address space.

HWSR0820E DCB OPEN FAILED FOR RECORDER DATA SET; R=*rc*, S=*sc*, M=*mc*

Explanation: DCB open failed for the recorder DCB.

In the message text:

- *rc* identifies the return code returned from the OPEN request.
- *sc* identifies the service code DCBOPEN.
- *mc* identifies the module issuing the message.

Module:

- HWSRCDR0

System Action: The message is issued and the recorder data set is set to closed.

System Programmer Response: In the system programmer's MVS console, see the error message on the line that directly precedes this error message to determine the appropriate action.

HWSR0880I RECORDER OPENED; M=*mc*

Explanation: A recorder function has been opened successfully.

In the message text:

- *mc* identifies the module issuing the message.

Module:

- HWSRCDR0

System Action: The recorder data set is now open and logging of input and output message text has begun.

System Programmer Response: None.

HWSR0881I RECORDER ALREADY OPENED; M=*mc*

Explanation: A recorder open command was issued; however, the recorder trace is already open.

In the message text:

- *mc* identifies the module issuing the message.

Module:

- HWSCHWS0

System Action: The recorder open request is ignored.

HWSR0890I RECORDER CLOSED; M=*mc*

Explanation: A recorder function has been closed successfully.

In the message text:

- *mc* identifies the module issuing the message.

Module:

- HWSRCDR0

System Action: The recorder data set is now closed and logging of input and output message text has ended.

System Programmer Response: None.

HWSR0891I RECORDER ALREADY CLOSED; M=*mc*

Explanation: A recorder close command was issued; however, the recorder trace is already closed.

In the message text:

- *mc* identifies the module issuing the message.

Module:

- HWSCHWS0

System Action: The recorder close request is ignored.

HWSS0700E FUNCTION WORK ELEMENT PROCESSING FAILURE; FUNC=*fn*, R=*rc*, S=*sc*, M=*mc*

Explanation: The function work element (FWE) cannot be processed. The FWE requests work between components and within components. This structure contains the function and parameters that a service requires for processing.

In the message text:

- *fn* identifies the function requested.
- *rc* identifies the return code.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 57 for an explanation of the service and return code.

Table 57. Service and Return Code Explanation

Service code	Short explanation	Return code	Meaning
INVFUNC	The function requested in the FWE is incorrect.	4	This is a processing error.

Module:

- SOCC — HWSSOCC0
- SCVC — HWSSCVC0

System Action: This message is issued and, if possible, the requestor of the function is notified. Otherwise, the FWE is freed. In all cases, IMS Connect continues to run.

System Programmer Response: This is probably an internal error. Search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump if available.

HWSS0712W UNABLE TO START SCHEDULER CONTROLLER FOR PORT=*portid*; R=*rc*, S=*sc*, M=*mc*

Explanation: Storage cannot be allocated for the scheduler controller structure, or the scheduler controller thread cannot be scheduled. This controller processes the connection of TCP/IP or Local clients.

In the message text:

- *portid* identifies the TCP/IP or Local port.
- *rc* identifies the return code.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 58 for an explanation of service and return codes.

Table 58. Service and Return Code Explanation

Service code	Short explanation	Return code	Meaning
GETTWUB	BPECBGET, the system service used to acquire the thread workunit (TWU) for the scheduler controller.	4	An incorrect CBTE address is passed to the CB get routine. This is an internal system error.
		8	Storage is unavailable to satisfy the request.
NOLOCAL	Open the local port.	4	Local portid is not specified.
OPENERR	Establish local communication mechanism.	4	Initialization of local mechanism fails.
SCHEDTWU	BPETHDCR, the system service used to schedule the scheduler controller thread.	4	An incorrect dispatcher work area is passed to the create thread routine.
		8	An incorrect TCB index value is passed on the TCBIDX parameter.
		12	A zero routine address is passed on the ROUTINE= parameter.

Table 58. Service and Return Code Explanation (continued)

Service code	Short explanation	Return code	Meaning
		16	An incorrect TCB table entry address is passed into the thread create routine. The BPETHDCR macro determines the TCBT address based on whether the parameter TCBTYPE, TCBIDX, or TCBDWA is specified. Ensure that this parameter is correctly coded.
		20	Unable to get storage for a thread control block (THCB) for the thread.
		24	Unable to get stack storage for the thread.
		28	The initial post of the thread fails.

Module:

- SOC3 — HWSSOC30

System Action: This message is issued and IMS Connect continues to run; however, no communication function is available to the identified TCP/IP of Local port.

System Programmer Response: Terminate IMS Connect and ensure that the region size in the JCL statement is large enough to accommodate the IMS Connect region. Restart IMS Connect. If the error recurs, search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump if available.

HWSS0714E UNABLE TO START A TCP/IP CLIENT ON PORT=*portid*; R=*rc*, S=*sc*, M=*mc*

Explanation: Storage cannot be allocated for the conversation controller structure, or the conversation controller thread cannot be scheduled. This controller schedules the communication functions for a TCP/IP client. This error is due to using a region size for IMS Connect that is too small or to a processing or internal system error.

In the message text:

- *portid* identifies the TCP/IP port.
- *rc* identifies the return code.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 59 for an explanation of service and return codes.

Table 59. Service and Return Code Explanation

Service code	Short explanation	Return code	Meaning
DUPESVT	A duplicate client ID (LUNAME) has been specified for this client.	4	Two different clients are using the same User ID.
GETSVTB	BPECBGET, the system service used to acquire the TCP/IP client table (SVT). This table represents the connected TCP/IP client.	4	An incorrect CBTE address is passed to the CB get routine. This is an internal system error.
8	Storage is unavailable to satisfy the request.		
GETTWUB	BPECBGET, the system service used to acquire the thread workunit (TWU) for the conversation controller.	4	An incorrect CBTE address is passed to the CB get routine. This is an internal system error.

Table 59. Service and Return Code Explanation (continued)

Service code	Short explanation	Return code	Meaning
		8	Storage is unavailable to satisfy the request.
INCLOSE	IMS Connect is in close process. No new connection with IMS Connect is possible.	12	This is a processing error.
SCHEDTWU	BPETHDCR, the system service used to schedule the scheduler controller thread.	4	An incorrect dispatcher work area is passed to the create thread routine. This is a system error.
		8	An incorrect TCB index value is passed on the TCBIDX parameter. This is an internal system error.
		12	A zero routine address is passed on the ROUTINE= parameter. This is an internal system error.

Table 59. Service and Return Code Explanation (continued)

Service code	Short explanation	Return code	Meaning
		16	An incorrect TCB table entry address is passed into the thread create routine. The BPETHDCR macro determines the TCBT address based on whether the parameter TCBTYPE, TCBIDX, or TCBDWA is specified. This is an internal system error.
		20	Unable to get storage for a thread control block (THCB) for the thread.
		24	Unable to get stack storage for the thread.
		28	The initial post of the thread failed. This is an internal system error.

Module:

- SSC1 — HWSSSC10

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: Take one of the following actions:

- If the problem is due to an internal system error and the problem recurs after stopping and restarting IMS Connect, search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump if available.
- If the problem is due to a storage shortage, either:

– Allow IMS Connect to continue running with the currently connected TCP/IP clients.
– Terminate and then restart IMS Connect, ensuring that the IMS Connect region size is large enough to accommodate an increase in TCP/IP client connections.

If the error recurs, search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump if available.

HWSS0727W TERMINATE FAILED FOR TCP/IP CLIENT=*portid_clientid*; R=*rc*, S=*sc*, M=*mc*

Explanation: An attempt to terminate the named client is unsuccessful.

In the message text:

- *portid* identifies the port.
- *clientid* identifies the TCP/IP client.
- *rc* identifies the return code.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 60 for an explanation of the service and return code.

Table 60. Service and Return Code Explanation

Service code	Short explanation	Return code	Meaning
NFNDSVT	The TCP/IP client table (SVT) using the portid and the clientid as the search value cannot be located. This table represents a TCP/IP client connection with IMS Connect.	4	This is a processing error.

Module:

- SCCL— HWSSCCL0

System Action: This is probably an internal error. Search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump if available.

HWSS0730W COMMAND=*command* FOR PORT=*portid* REJECTED, CLIENT(S) IN PROGRESS; M=*mc*

Explanation: An attempt to terminate the port with a command cannot be processed because IMS Connect clients are currently scheduled for this port.

In the message text:

- *command* identifies the datastore.
- *portid* identifies the port.
- *mc* identifies the module issuing the message.

Module:

- SSTP— HWSSSTP0

System Action: Reenter the command after all active clients for the port have become inactive. Use the `VIEWPORT` command to determine the activity on the port.

HWSS0742W MESSAGE FAILURE, RECEIVED FROM ORIGIN=*portid_clientid* TO DESTID=*did*; R=*rc*, S=*sc*, M=*mc*

Explanation: IMS Connect is unable to forward a message received from TCP/IP client *clientid* which is communicating through port *portid* to the required datastore destination.

In the message text:

- *portid* identifies the TCP/IP port.
- *clientid* identifies the TCP/IP client.
- *did* identifies the datastore.
- *rc* identifies the return code.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 61 for an explanation of service and return codes.

Table 61. Service and Return Code Explanation

Service code	Short explanation	Return code	Meaning
DSCLOSE	All datastores are becoming inactive. This could result from a `CLOSEHWS` command that is shutting down IMS Connect.	12	This is a processing error.

Table 61. Service and Return Code Explanation (continued)

Service code	Short explanation	Return code	Meaning
DUPECLNT	Duplicate Client ID has been detected.	8	Client ID should be unique.
GETFWEB	BPECBGET, the system service used to acquire an FWE for queuing of messages. The FWE is used as the queuing structure for a message.	4	An incorrect CBTE address is passed to the CB get routine. This is an internal system error.
		8	Storage is unavailable to satisfy the request.
INVLDSTA	Invalid state has been detected.	8	IMS is expecting an ACK, NACK, or deallocate, rather than an input message.
INVLDTOK	Invalid server token has been detected.	8	Use the correct server token for the conversation iteration. Or, a second client is starting a conversation and is using a duplicate ID while the first client is in a conversation.

Table 61. Service and Return Code Explanation (continued)

Service code	Short explanation	Return code	Meaning
NFNDCOMP	The component that handles the requested function cannot be found. An IMS Connect component issues an interface call for another component's service and the requested component cannot be located.	4	This is a processing error.
NFNDDST	The datastore table cannot be found. This table maintains the activity of a datastore.	4	This is a processing error.
NFNDFUNC	The requested function cannot be found. An IMS Connect component issues an interface call for another component's service and the requested service cannot be located.	8	This is a processing error.
SHUTDOWN	A CLOSEHWS command has been issued. IMS Connect termination is in process.	8	Termination in process.
STP/CLSE	Datastore/IMSplex in stop or close process.	4	This is a processing error.

Module:

- SRE4 — HWSSRE40

System Action: This message is issued and IMS Connect continues to run. The message in progress is released.

System Programmer Response: The response can vary depending on the service code.

For service codes DSCLOSE, NFNDDST, and SHUTDOWN, the datastore is no longer active or connected to IMS Connect. Investigate why the datastore was terminated, or if a CLOSEDS command was issued.

For service codes DUPLNT and INVLDTOK, a second client connects to IMS Connect with the same Client ID currently identified to IMS Connect. The client might have disconnected and reconnected with the same Client ID; however, IMS Connect is not aware of the disconnect because the client is in a CONN state waiting for a response from IMS.

For service code INVLDST, the client failed to send an ACK/NAK response when the synch level is defined as CONFIRM; or the client left the conversation early without issuing a DEALLOCATE request to IMS Connect.

HWSS0746W UNABLE TO NOTIFY ORIGIN=*portid_clientid* OF MESSAGE FAILURE; R=*rc*, S=*sc*, M=*mc*

Explanation: IMS Connect is unable to notify the named TCP/IP client about an error that has occurred while processing a request message or a response that IMS Connect has received.

In the message text:

- *portid* identifies the TCP/IP port.
- *clientid* identifies the TCP/IP client.
- *rc* identifies the return code.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 62 for an explanation of service and return codes.

Table 62. Service and Return Code Explanation

Service code	Short explanation	Return code	Meaning
GETFWEB	BPECBGET, the system service used to acquire an FWE for queuing of messages. The FWE is used as the queuing structure and the message is anchored off the FWE.	4	An incorrect CBTE address is passed to the CB get routine. This is an internal system error.

Table 62. Service and Return Code Explanation (continued)

Service code	Short explanation	Return code	Meaning
		8	Storage is unavailable to satisfy the request.
GETC01K	BPECBGET, the system service used to acquire storage to build the error message.	4	An incorrect CBTE address is passed to the CB get routine. This is an internal system error.
		8	Storage is unavailable to satisfy the request.
NFNDSVT	The TCP/IP client table cannot be found. This table maintains the activity of a connected TCP/IP client.	4	This is a processing error.

Module:

- SRE4 — HWSSRE40

System Action: This message is issued and IMS Connect continues to run. The request or response message being processed is discarded.

System Programmer Response: This error can occur when not enough storage is available to complete the process. If the problem persists, search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump if available.

HWSS0761I TCPIP COMMUNICATION WITH CLIENT=*portid_clientid* STOPPED; M=*mc*

Explanation: The communication for the named TCP/IP client stops.

In the message text:

- *portid* identifies the TCP/IP port.
- *clientid* identifies the TCP/IP client.
- *mc* identifies the module issuing the message.

Module:

- SCCM — HWSSCCM0

System Action: This message is issued when a `STOPCLNT` command has taken effect.

HWSS0762I LOCAL COMMUNICATION WITH CLIENT=*cname* STOPPED; M=*mc*

Explanation: Local communication for the named client is stopped.

In the message text:

- *cname* identifies the client.
- *mc* identifies the module issuing the message.

Module:

- PCCM - HWSPCCM0

System Action: This message is issued when a `STOPCLNT` command takes effect for a client using a Local Option connection. IMS connect continues to run.

HWSS0763W LOCAL COMMUNICATIONS WITH CLIENT=*cname* CONNECTION FAILURE; R=*rc* S=*sc* M=*mc*

Explanation: An IMS Connect client could not connect to IMS Connect. Refer to the service code (*sc*) for more information.

In the message text:

- *cname* identifies the client.
- *rc* identifies the return code.
- *sc* identifies the service code. Service codes can be codes that either specifically identify the error or are returned by called services that failed the request.
- *mc* identifies the module issuing the message.

Module:

- PSCH - HWSPSCH0

System Action: This message is issued, and IMS Connect continues to run. The response in progress is released.

System Programmer Response: This is probably a storage error. Check that the region size for IMS Connect is large enough to complete the process. If the error reoccurs, search the problem-reporting databases to find a correction to the problem. If a correction does not exist, contact the IMS Support Center. Provide the JCL, SYSLOG, and dump, if available.

HWSS0770I LISTENING ON PORT=*portid* TERMINATED; M=*mc*

Explanation: The communication for the named port has terminated.

In the message text:

- *portid* identifies the TCP/IP port.
- *mc* identifies the module issuing the message.

Module:

- SCCH — HWSSSCH0

System Action: This message is issued when listening has terminated on a port.

HWSS0771W LISTENING ON PORT=*portid* FAILED; R=*rc*, S=*sc*, M=*mc*

Explanation: An attempt to start listening on the named port is unsuccessful.

In the message text:

- *portid* identifies the TCP/IP port.
- *rc* identifies the return code.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 63 for an explanation of service and return codes.

Table 63. Service and Return Code Explanation

Service code	Short explanation	Return code	Meaning
SOCKFAIL	TCP/IP SOCKET function failed.	-1	Return code from TCP/IP. See message HWSP1415E for TCP/IP failure.
COMMAND	Connection not completed.	4	A `STOPCLNT`, `STOPPORT`, or `CLOSEHWS` terminated a connection that had not completed.
GETMFAIL	Connection not completed.	4	IMS Connect internal `GETMAIN` failed.
MAXSOC	Reached maximum socket number.	4	IMS Connect will not accept any input until a socket becomes available.

Module:

- SSCH — HWSSSCH0

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: Ensure that the named ports are available to IMS Connect for communications. If the error recurs, search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump if available.

HWSS0775W UNABLE TO START PORT=*portid*; R=*rc*, S=*sc*, M=*mc*

Explanation: An attempt to open the named port is unsuccessful.

In the message text:

- *portid* identifies the TCP/IP port.
- *rc* identifies the return code.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 64 for an explanation of the service and return code.

Table 64. Service and Return Code Explanation

Service code	Short explanation	Return code	Meaning
NFNDSCT	The port entry table (SCT) using the portid as the search value cannot be located. This table represents a port while connected with IMS Connect.	4	This is a processing error.

Module:

- SOCM — HWSSOCM0

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: Ensure that the port name in the `OPENPORT` command is correct. If the error recurs, search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump if available.

HWSS0780I TCPIP COMMUNICATION ON HOSTNAME=*hostname* OPENED; M=*mc*

Explanation: The communication facility for TCP/IP is available.

In the message text:

- *hostname* identifies the TCP/IP hostname.
- *mc* identifies the module issuing the message.

Module:

- SOC1 — HWSSOC10

System Action: This message is issued during IMS Connect startup and whenever communication is established with the TCP/IP communication facility.

HWSS0781I TCPIP COMMUNICATION FUNCTION FAILED; M=*mc*

Explanation: The communication facility for TCP/IP has become inactive.

In the message text:

- *mc* identifies the module issuing the message.

Module:

- SOCL — HWSSOCL0

System Action: This message is issued when IMS Connect communication with the TCP/IP communication facility is decoupled.

HWSS0785W OPEN TCPIP COMMUNICATION ON HOSTNAME=*hostname* FAILED; R=*rc*, S=*sc*, M=*mc*

Explanation: An attempt to start communication with TCP/IP was unsuccessful.

In the message text:

- *hostname* identifies the TCP/IP hostname.
- *rc* identifies the return code.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

Module:

- SOC1 — HWSSOC10

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: Ensure that the TCP/IP hostname was specified correctly in the `HWSCFGxx` member or that the MVS TCPIP communication facility is active. If the error recurs, search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump if available.

HWSS0790I LISTENING ON PORT=*portid* STARTED; M=*mc*

Explanation: Communication has started for the named TCP/IP port.

In the message text:

- *portid* identifies the TCP/IP port.
- *mc* identifies the module issuing the message.

Module:

- SOC2 — HWSSOC20

System Action: This message is issued when

listening has started on a TCP/IP port.

HWSSSL00E UNABLE TO *action*, RC=*rc*: *error*

Explanation: An error has occurred in SSL.

In the message text:

- *action* identifies the name of the action that failed.
- *rc* identifies the return code.
- *error* identifies the error message specified by gsk_strerror( ).

Module:

- HWSSSL00

System Action: This message is issued. The SSL socket is closed. IMS Connect continues to run fully. If the message occurs during the SSL environment initialization (when the ports are setup to listen), the port may be closed.

System Programmer Response: If this is an initialization error, the SSL input file needs to be examined and fixed according to the error message received.

HWSSSL00I SSL DEBUG MESSAGE

Explanation: The message corresponds to an SSL debugging message. The message is only enabled if the DEBUG_SSL variable is turned on. The message text pertains to the SSL encryption/transfer process or the SSL initialization process.

Module:

- HWSSSL00

System Action: None

System Programmer Response: None

HWSX0901E UNABLE TO ALLOCATE ENVIRONMENT SYSTEM TABLE; R=*rc*, S=*sc*, M=*mc*

Explanation: Storage cannot be allocated for the environment system table (EST). The EST anchors all of the common service routines, control tables, and control blocks used by the IMS Connect components.

In the message text:

- *rc* identifies the return code.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 65 for an explanation of service and return codes.

Table 65. Service and Return Code Explanation

Service code	Short explanation	Return code	Meaning
BPEGETM	BPEGETM, the system service used to obtain the storage.	4	An incorrect or unsupported subpool is specified.
		8	A zero length is requested.
		12	Unable to obtain the requested storage (MVS GETMAIN failed).

Module:

- XTRS — HWSXTRS0

System Action: This message is issued and IMS Connect terminates.

System Programmer Response: Ensure that the region size in the JCL statement is large enough to accommodate the IMS Connect region. If the error recurs, search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump if available.

HWSX0902E UNABLE TO ALLOCATE INTERFACE STRUCTURE; R=*rc*, S=*sc*, M=*mc*

Explanation: Storage cannot be allocated for the interface execution structure. This structure contains the linkage to the functions supported by each component within IMS Connect.

In the message text:

- *rc* identifies the return code.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 66 on page 228 for an explanation of service and return codes.

Table 66. Service and Return Code Explanation

Service code	Short explanation	Return code	Meaning
GETINTF	BPEGETM, the system service used to obtain the interface control block structure.	4	An incorrect CBTE address is passed to the CB get routine. This is an internal system error.
		8	Storage is unavailable to satisfy the request.

Module:

- ITBL — HWSITBL0

System Action: This message is issued and IMS Connect terminates.

System Programmer Response: Ensure that the region size in the JCL statement is large enough to accommodate the IMS Connect region. If the error recurs, search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump if available.

HWSX0903E UNABLE TO ALLOCATE EXECUTION TABLE; R=*rc*, S=*sc*, M=*mc*

Explanation: Storage cannot be allocated for the execution table (E_table). This structure contains the component-related data required for each component to run within the IMS Connect environment.

In the message text:

- *rc* identifies the return code.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 67 for an explanation of service and return codes.

Table 67. Service and Return Code Explanation

Service code	Short explanation	Return code	Meaning
GETETBL	BPEGETM, the system service used to obtain the execution table.	4	An incorrect CBTE address is passed to the CB get routine. This is an internal system error.
		8	Storage is unavailable to satisfy the request.

Module:

- XHD0 — HWSXHD00
- XSH0 — HWSXSH00
- XCM0 — HWSXCM00

System Action: This message is issued and IMS Connect terminates.

System Programmer Response: Ensure that the region size in the JCL statement is large enough to accommodate the IMS Connect region. If the error recurs, search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump if available.

HWSX0904E UNABLE TO ALLOCATE COMPONENT INTERFACE; R=*rc*, S=*sc*, M=*mc*

Explanation: A component cannot register its interface for the functions it supports. This message follows message HWSX0902E, and indicates that storage cannot be allocated for the component interface structure.

In the message text:

- *rc* identifies the return code.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 68 on page 229 for an explanation of service and return codes.

Table 68. Service and Return Code Explanation

Service code	Short explanation	Return code	Meaning
REGINTFR	HWSINTFR is the IMS Connect service used to register the component's interface.	4	An incorrect CBTE address is passed to the CB get routine. This is an internal system error.
		8	Storage is unavailable to satisfy the request.

Module:

- XHD1 — HWSXHD10
- XSH1 — HWSXSH10
- XCM1 — HWSXCM10

System Action: This message is issued and IMS Connect terminates.

System Programmer Response: Ensure that the region size in the JCL statement is large enough to accommodate the IMS Connect region. If the error recurs, search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump if available.

HWSX0905E UNABLE TO ALLOCATE MASTER SERVER; R=*rc*, S=*sc*, M=*mc*

Explanation: Storage cannot be allocated for the master server control structure, or the master server thread cannot be scheduled. This server services all requests directed to the IMS Connect environment that are not directed to a specific component.

In the message text:

- *rc* identifies the return code.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 69 for an explanation of service and return codes.

Table 69. Service and Return Code Explanation

Service code	Short explanation	Return code	Meaning
GETTWUB	BPECBGET, the system service used to acquire the thread workunit (TWU).	4	An incorrect CBTE address is passed to the CB get routine. This is an internal system error.
		8	Storage is unavailable to satisfy the request.
SCHEDTWU	BPETHDCR, the system service used to schedule the thread.	4	An incorrect dispatcher work area is passed to the create thread routine.
		8	An incorrect TCB index value is passed on the TCBIDX parameter.
		12	A zero routine address is passed on the ROUTINE= parameter.
		16	An incorrect TCB table entry address is passed into the thread create routine. The BPETHDCR macro determines the TCBT address based on whether the parameter TCBTYPE, TCBIDX, or TCBDWA is specified. Ensure that this parameter is correctly coded.

Table 69. Service and Return Code Explanation (continued)

Service code	Short explanation	Return code	Meaning
		20	Unable to get storage for a thread control block (THCB) for the thread.
		24	Unable to get stack storage for the thread.
		28	The initial post of the thread fails.

Module:

- XTRS — HWSXTRS0

System Action: This message is issued and IMS Connect terminates.

System Programmer Response: Ensure that the region size in the JCL statement is large enough to accommodate the IMS Connect region. If the error recurs, search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump if available.

HWSX0907E UNABLE TO START OPEN/CLOSE CONTROLLER; R=*rc*, S=*sc*, M=*mc*

Explanation: Storage cannot be allocated for the open/close controller structure, or the open/close controller thread cannot be scheduled. This controller manages the linkage with the communication feature that IMS Connect uses to communicate with datastores and IMS Connect clients.

In the message text:

- *rc* identifies the return code.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 70 for an explanation of service and return codes.

Table 70. Service and Return Code Explanation

Service code	Short explanation	Return code	Meaning
GETTWUB	BPECBGET, the system service used to acquire the thread workunit (TWU) for the open/close controller.	4	An incorrect CBTE address is passed to the CB get routine. This is an internal system error.
		8	Storage is unavailable to satisfy the request.
SCHEDTWU	BPETHDCR, the system service used to schedule the open/close controller thread.	4	An incorrect dispatcher work area is passed to the create thread routine.
		8	An incorrect TCB index value is passed on the TCBIDX parameter.
		12	A zero routine address is passed on the ROUTINE= parameter.

Table 70. Service and Return Code Explanation (continued)

Service code	Short explanation	Return code	Meaning
		16	An incorrect TCB table entry address is passed into the thread create routine. The BPETHDCR macro determines the TCBT address based on whether the parameter TCBTYPE, TCBIDX, or TCBDWA is specified. Ensure that this parameter is correctly coded.
		20	Unable to get storage for a thread control block (THCB) for the thread.
		24	Unable to get stack storage for the thread.
		28	The initial post of the thread fails.

Module:

- XHD3 — HWSXHD30
- XSH3 — HWSXSH30

System Action: This message is issued and IMS Connect terminates.

System Programmer Response: Ensure that the region size in the JCL statement is large enough to accommodate the IMS Connect region. If the error recurs, search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump if available.

HWSX0909E ERROR IN PROCESSING CONFIG MEMBER *name*; M=*mc*
HWSCFG IS NOT SPECIFIED IN THE STARTUP PARMS.
UNABLE TO GET STORAGE; R=*rc*, S=*sc*
ERROR READING MEMBER; R=*rc*, S=*sc*
ERROR PARSING MEMBER; R=*rc*, S=*sc*
INAVLID PARAMETER(S) DETECTED; R=*rc*, S=*sc*
UNABLE TO ALLOCATE SCT; R=*rc*, S=*sc*
UNABLE TO ALLOCATE DCT; R=*rc*, S=*sc*
DUPLICATE PORT ID; R=*rc*, S=*sc*

Explanation: During the processing of the CONFIG member specifications, an error is detected, such as incorrect specification or allocation of storage for the execution control structure.

In the message text:

- *name* identifies the name of the CONFIG member.
- *rc* identifies the return code.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 71 for an explanation of service and return codes.

Table 71. Service and Return Code Explanation

Service code	Short explanation	Return code	Meaning
BPEPARSE	The system service used to parse the parameters.	4	The parser definition grammar passed on PADER is not a correct BPEPADEF grammar.
		8	The control block storage passed on CBSTG is not large enough to contain the control blocks that needed to be built to contain the parsed input data.

Table 71. Service and Return Code Explanation (continued)

Service code	Short explanation	Return code	Meaning
		12	The CBSTG address passed to the parsing service is 0.
		16	The input data address passed to the parsing service is 0.
		20	An internal error occurs in the parsing service.
	The system service used to parse the parameters.	64	An invalid keyword is detected in the input data.
		68	An unknown positional parameter is encountered in the input.
		72	A keyword parameter is specified with an equal sign followed by a sublist of values (KEYWORD= xxx,yyy[,...]). a sublist must be specified in parentheses; an equal sign is optional when used with a sublist but required if a keyword has only a single value.
		76	The input ended before all of a sublist or keyword has been parsed.

Table 71. Service and Return Code Explanation (continued)

Service code	Short explanation	Return code	Meaning
		80	A keyword is encountered (KEYWORD(...) or KEYWORD=...) when a value is expected.
		84	An input number being parsed is out of the range allowed for its output field length.
		88	A parameter value defined as decimal contains nondecimal digits.
		92	A parameter value defined as hex contains nonhex digits.
		96	A parameter value defined as a key value parameter has an unknown key value.
		100	A keyword parameter appears multiple times and is not defined as being repeatable.
		104	A parameter defined with REQUIRED= YES on BPEPADEF is not found in the input data (omitted).

Table 71. Service and Return Code Explanation (continued)

Service code	Short explanation	Return code	Meaning
		252	The parameter list version generated by BPEPARSE is not supported by the parse service module - macro/module level mismatch.
GETSCTB	BPECBGET, the system service used to acquire the server communi-cation table (SCT).	4	An incorrect CBTE address is passed to the CB get routine. This is an internal system error.
		8	Storage is unavailable to satisfy the request.
GETDCTB	BPECBGET, the system service used to acquire the datastore communi-cation table (DCT).	4	An incorrect CBTE address is passed to the CB get routine. This is an internal system error.
		8	Storage is unavailable to satisfy the request.

Module:

- XCFG — HWSXCFG0

System Action: This message is issued and IMS Connect terminates.

System Programmer Response: Ensure that the parameters in the CONFIG member are specified correctly and, if it is a storage problem, ensure that the region size in the JCL statement is large enough to accommodate the IMS Connect region. If the error recurs, search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump if available.

HWSX0910E UNABLE TO START COMMAND CONTROLLER; R=*rc*, S=*sc*, M=*mc*

Explanation: Storage cannot be allocated for the command controller control structure, or the command controller thread cannot be scheduled. This server services all requests directed to the IMS Connect environment that are not directed to a specific component.

In the message text:

- *rc* identifies the return code.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 72 for an explanation of service and return codes.

Table 72. Service and Return Code Explanation

Service code	Short explanation	Return code (decimal)	Meaning
GETTWUB	BPECBGET, the system service used to acquire the thread workunit (TWU).	4	An incorrect CBTE address is passed to the CB get routine. This is an internal system error.
		8	Storage is unavailable to satisfy the request.
SCHEDTWU	BPETHDCR, the system service used to schedule the thread.	4	An incorrect dispatcher work area is passed to the create thread routine.
		8	An incorrect TCB index value is passed on the TCBIDX parameter.

Table 72. Service and Return Code Explanation (continued)

Service code	Short explanation	Return code (decimal)	Meaning
		12	A zero routine address is passed on the ROUTINE= parameter.
		16	An incorrect TCB table entry address is passed into the thread create routine. The BPETHDCR macro determines the TCBT address based on whether the parameter TCBTYPE, TCBIDX, or TCBDWA is specified. Ensure that this parameter is correctly coded.
		20	Unable to get storage for a thread control block (THCB) for the thread.
		24	Unable to get stack storage for the thread.
		28	The initial post of the thread fails.

Module:

- XCM3 — HWSXCM30

System Action: This message is issued and IMS Connect terminates.

System Programmer Response: Ensure that the region size in the JCL statement is large enough to accommodate the IMS Connect region. If the error recurs, search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump if available.

HWSX0911E UNABLE TO START COMMAND VERB CONTROLLER; R=*rc*, S=*sc*, M=*mc*

Explanation: Storage cannot be allocated for the command controller control structure, or the command controller thread cannot be scheduled. This server services all requests directed to the IMS Connect environment that are not directed to a specific component.

In the message text:

- *rc* identifies the return code.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 73 for an explanation of service and return codes.

Table 73. Service and Return Code Explanation

Service code	Short explanation	Return code	Meaning
GETTWUB	BPECBGET, the system service used to acquire the thread workunit (TWU).	4	An incorrect CBTE address is passed to the CB get routine. This is an internal system error.
		8	Storage is unavailable to satisfy the request.
SCHEDTWU	BPETHDCR, the system service used to schedule the thread.	4	An incorrect dispatcher work area is passed to the create thread routine.
		8	An incorrect TCB index value is passed on the TCBIDX parameter.

Table 73. Service and Return Code Explanation (continued)

Service code	Short explanation	Return code	Meaning
		12	A zero routine address is passed on the ROUTINE= parameter.
		16	An incorrect TCB table entry address is passed into the thread create routine. The BPETHDCR macro determines the TCBT address based on whether the parameter TCBTYPE, TCBIDX, or TCBDWA is specified. Ensure that this parameter is correctly coded.
		20	Unable to get storage for a thread control block (THCB) for the thread.
		24	Unable to get stack storage for the thread.
		28	The initial post of the thread fails.

Module:

- XCM3 — HWSXCM30

System Action: This message is issued and IMS Connect terminates.

System Programmer Response: Ensure that the region size in the JCL statement is large enough to accommodate the IMS Connect region. If the error recurs, search the problem-reporting databases to find a correction for the problem. If none exists, contact the IBM Support Center. Provide the JCL, SYSLOG, and dump if available.

HWSX0912E HWS STARTED IN KEY*ky*— KEY 7 IS REQUIRED

Explanation: IMS Connect is executed in supervisor state and key 7.

In the message text:

- *ky* identifies the key.

Module:

- HWS — HWSHWS00

System Action: Authorize to the APF the resident library (IMS.RESLIB) in which the IMS Connect modules reside.

HWSX0912W HWSUINIT RETURNS WARNING CODE; R=*rc*, S=*sc*, M=*mc*

Explanation: HWSUINIT, the user initialization exit, issues a warning return code. The meaning of that return code is defined by the user initialization exit itself. IMS Connect is not affected by this warning code and continues its initialization processing.

In the message text:

- *rc* identifies the return code that HWSUINIT sets.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 74 for an explanation of the service and return code.

Table 74. Service and Return Code Explanation

Service code	Short explanation	Return code	Meaning
UINITFAIL	HWSUINIT returns with a warning code. The warning code is defined by the exit.	1–7	The meaning of the HWSUINIT-returned warning code is defined by the user initialization exit itself. IMS Connect is not affected by this warning, and continues its initialization processing.

Module:

- XITF — HWSXITF0

System Action: This message is issued and IMS Connect continues its initialization processing.

System Programmer Response: Because your installation defines the warning code, you must determine the corrective action to take, and whether to restart IMS Connect.

HWSX0913E HWSUINIT RETURN CODE >=8, IMS CONNECT SHUTDOWN; R=*rc*, S=*sc*, M=*mc*

Explanation: HWSUINIT, the user initialization exit, issues a return code of 8 or higher. IMS Connect terminates initialization processing and shuts down the address space.

In the message text:

- *rc* identifies the return code that HWSUINIT sets.
- *sc* identifies the service code. Service codes can contain either codes that more specifically identify the error, or codes returned by called services that failed the request.
- *mc* identifies the module issuing the message.

See Table 75 for an explanation of the service and return code.

Table 75. Service and Return Code Explanation

Service code	Short explanation	Return code	Meaning
UINTFAIL	HWSUINIT returns with an error code of eight or higher to force IMS Connect to terminate.	8 or higher	An error return code of 8 or higher notifies IMS Connect that HWSUINIT, the user initialization exit routine, has encountered an error. IMS Connect initialization stops and IMS Connect terminates.

Module:

- XITF — HWSXITF0

System Action: This message is issued and IMS Connect terminates.

System Programmer Response: Because your installation defines the error code, you must determine the corrective action to take, and whether to restart IMS Connect.

HWSX0930I HWSTECL0 NOT INITIALIZED, R15=*nn*, R0=*mm*, M=*xxx*

Explanation: IMS Connect loads the module, HWSTECL0, and calls it for event recording initialization. HWSTECL0 returns with a return and reason code indicating initialization is unsuccessful.

In the message text:

- *nn* identifies the return code that HWSTECL0 set.
- *mm* identifies the reason code associated with any non-zero return codes passed.
- *xxx* identifies the module issuing the message

See Table 76 for an explanation of the service and return codes.

Table 76. Service and Return Code Explanation

Service code	Register Number	Return code	Meaning
HWSTECL0	R0		Reason code associated with any non-zero return codes passed.
	R15	0	Initialization was successful. Check the EICB to see if trace or event recording is active.
		8	Initialization was not successful. See reason code for additional information.

Module:

- HWSINIT0

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: Check with the provider for HWSTECL0 for possible causes of non-zero

return code and corresponding reason codes.

HWSX0931I HWSTECL0 INIT SUCCESSFUL, R15=*nn*, R0=*nn*, M=*xxx*

Explanation: IMS Connect loads the module, HWSTECL0, and calls it for event recording initialization. HWSTECL0 returns with a return and reason code indicating initialization is successful.

See Table 76 on page 236 for an explanation of the service and return codes.

In the message text:

- *nn* identifies the return code that HWSTECL0 set.
- *mm* identifies the reason code associated with any non-zero return codes passed.
- *xxx* identifies the module issuing the message

Module:

- HWSINIT0

System Action: This message is issued and IMS Connect continues to run.

System Programmer Response: No action is required.

Chapter 8. CQS Messages

This section explains the messages issued by the Common Queue Server (CQS). The CQS identifier (*cqsid*) is appended to all CQS messages.

Please consult the "Structured Call Interface" section in *IMS Version 9: Common Service Layer Guide and Reference* for information on the return and reason codes for CSL services.

| For a description of the CQS Control List entries, see Appendix H, "CQS Control List Entries," on page
| 663.

CQS0001E CQS INITIALIZATION ERROR IN *module*, *service* RC=*rc* RSN=*rsn*

Explanation: An error occurred during CQS address space initialization in the identified module. In the message text:

- *service name* RC=*rctext*

  service name — The name of the failing service.

  rc — The return code from the failing service. Refer to "CQS Service Return Codes" on page 25 for a description of these codes, and refer to "BPE Service Return Codes" on page 3 for a description of BPE service codes.

  text — provides additional information to describe the error.

  When BPELOAD is displayed as the failing service name, CQS was attempting to load a module. The text that appears in the message is the name of the module that could not be loaded. Ensure that the module is linked into IMS.SDFSRESL.

  When CQSIXCF0 is displayed as the failing service name and RC=X'28', two different CQS address spaces specified the same value in the SSN parameter in the execution parameters or the CQSIPxxx PROCLIB member. Change the SSN value of one of the CQS address spaces.

  When ENFREQ is displayed as the failing service name, the RC= is the return code from the MVS ENFREQ service. For more information, see the *z/OS MVS Programming: Authorized Assembler Services Reference, Volume 2* manual.

- PARM VALIDATION ERROR *parmname*

  parmname is the execution or PROCLIB parameter being validated and can be one of the following:

  SSN — This parameter was not specified in the execute parameters or in the CQSIPxxx PROCLIB member.

  CQSGROUP — This parameter was not specified in the execute parameters or in the CQSIPxxx PROCLIB member.

  ARMRST — An invalid value was specified for the ARMRST keyword in the execute parameters or in the CQSIPxxx PROCLIB member.

  STRNAM SL — This parameter was not specified in a structure definition in the CQSSLxxx PROCLIB member.

  CHKPTDSN — This parameter was not specified in a structure definition in the CQSSLxxx PROCLIB member.

  SYSCHKPT — An invalid value was specified for the SYSCHKPT keyword in a structure definition in the CQSSLxxx PROCLIB member.

  CK/CK DSN — Two different structure definitions specified the same value for the checkpoint data set name (CHKPTDSN) in the CQSSLxxx PROCLIB member.

  STRNAM SG — This parameter was not specified in a structure definition in the CQSSGxxx PROCLIB member.

  ST/OV DEF — A single structure definition specified the same value for the primary structure name (STRNAME) and the overflow structure name (OVFLWSTR) in the CQSSGxxx PROCLIB member.

  SRDSDSN1 — This parameter was not specified in a structure definition in the CQSSGxxx PROCLIB member.

  SRDSDSN2 — This parameter was not specified in a structure definition in the CQSSGxxx PROCLIB member.

  S1/S2 DEF — A single structure definition specified the same value for structure recovery data set name 1 (SRDSDSN1) and structure recovery data set name 2

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(SRDSDSN2) in the CQSSGxxx PROCLIB member.

LOGNAME This parameter was not specified in a structure definition in the CQSSGxxx PROCLIB member.

OVFLWMAX= An invalid value was specified for the OVFLWMAX keyword in a structure definition in the CQSSGxxx PROCLIB member.

STRMIN An invalid value was specified for the STRMIN keyword in a structure definition in the CQSSGxxx PROCLIB member.

ST/OV SG Two different structure definitions specified the same value for the primary structure name (STRNAME) and the overflow structure name (OVFLWSTR) in the CQSSGxxx PROCLIB member.

OVFSTR SG Two different structure definitions specified the same value for the overflow structure name (OVFLWSTR) in the CQSSGxxx PROCLIB member.

LOGNAM SG Two different structure definitions specified the same value for the log stream name (LOGNAME) in the CQSSGxxx PROCLIB member.

S1/S2 SG Two different structure definitions specified the same value for structure recovery data set name 1 (SRDSDSN1) or structure recovery data set name 2 (SRDSDSN2), or both, in the CQSSGxxx PROCLIB member.

CQSSL STR A structure name specified in a structure definition in the CQSSLxxx PROCLIB member was not found in the CQSSGxxx PROCLIB member or there was a duplicate structure name in the CQSSLxxx PROCLIB member.

CQSSG STR A structure name specified in a structure definition in the CQSSGxxx PROCLIB member was not found in the CQSSLxxx PROCLIB member or there was a duplicate structure name in the CQSSGxxx PROCLIB member.

CK/SR DSN A structure definition in the CQSSLxxx PROCLIB member specified a checkpoint data set name (CHKPTDSN) that is the same name used for structure recovery data set name 1 (SRDSDSN1), structure recovery data set name 2 (SRDSDSN2), or both, in a structure definition in the CQSSGxxx PROCLIB member.

- UNKNOWN TCB TYPE *tcbname*

  tcbname is the name of the TCB.

System Action: CQS terminates abnormally with abend code U0010 or U0014.

Programmer Response: For errors not described above, save the message text, abend code, abend subcode, and dump, and contact the IBM Support Center.

System Programmer Response: If you are unable to resolve the problem, save the SYSLOG and dump, and call the IBM Support Center for help.

Module: CQSICHK0, CQSICQS0, CQSIENF0, CQSIOFL0, CQSIRQS0, CQSIST00,CQSIST10, CQSIST20, CQSIST30, CQSIST40, CQSITCB0

CQS0007I CQS *cqsname* INITIALIZATION WAITING FOR REBUILD TO COMPLETE.

Explanation: CQS is waiting for a structure to rebuild before it can connect to the structure and continue initialization. In the message text:

cqsname
The name of the CQS that is waiting

System Action: CQS processing continues.

System Programmer Response: Wait for the rebuild to complete.

Module: CQSSTS10

CQS0008W STRUCTURE *structurename* IS VOLATILE; CONSIDER STRUCTURE CHECKPOINT

Explanation: See the last form of this message for an explanation.

CQS0008W STRUCTURE *structurename* IS VOLATILE;

Explanation: The structure identified by *structurename* is volatile. If the structure does not support structure checkpoint, such as a resource structure, the second form of the message is issued.

System Action: CQS processing continues.

System Programmer Response: For a structure that supports structure checkpoint, consider taking a structure checkpoint in case the structure is lost because of structure volatility.

Module: CQSSTE00, CQSSTS10

CQS0009W STRUCTURE *structurename* REQUIRES STRUCTURE CHECKPOINT FOR RECOVERY

Explanation: During CQS initialization, CQS detected that a structure contained client data, but the data was not available from another source should structure recovery be required. Neither the structure recovery data sets (SRDS) nor the CQS log stream are valid for structure recovery, and neither of the SRDS contains valid client data. The CQS log stream does not contain the beginning of the log X'4001' record. In the message text *structurename* is the name of the structure that CQS is processing.

System Action: CQS processing continues.

System Programmer Response: When all CQS address spaces have completed restart, initiate a structure checkpoint for the specified structure. For IMS users, when an IMS control region is connected to the CQS address space, you can enter the IMS command /CQCHKPT SHAREDQ to start a structure checkpoint.

Module: CQSIST30

CQS0013E STRUCTURE *structurename* ALLOC ERROR; CFNAME=*cfname* RSN=*rsncode* SIZE NEEDED(4K BLOCKS)=*4kblocks*

Explanation: CQS initialization attempted to allocate a structure, but the structure allocation failed because no suitable Coupling Facility was found for the allocation. One `CQS0013E` message is issued for each Coupling Facility (in the CFRM policy preference list) that CQS attempted to allocate the structure upon.

The allocation of the structure might have failed for one of the following reasons:

- The structure size might be too small to accommodate the z/OS control space and the CQS structure attributes (for example, EMCs for queue structures). The structure size is defined in the CFRM policy with the INITSIZE or SIZE parameter.
- No Coupling Facility in the CFRM policy preference list could accommodate the structure size defined in the CFRM policy.

In the message text:

structurename
: Structure name that failed allocation.

cfname
: Coupling Facility name where the structure allocation was attempted.

rsncode
: Structure allocate failure reason. If the structure allocate succeeded, the reason code is zero, but the structure attributes were unacceptable to CQS (for example, there were no EMCs defined for a queue structure).

4Kblocks
: The minimum structure size in 4K blocks (hexadecimal) needed to accommodate the z/OS control space and the CQS structure attributes for the structure INITSIZE or SIZE defined in the CFRM policy.

System Action: CQS abends with U0014-00000200.

System Programmer Response: If no Coupling Facility has enough storage to accommodate the structure, free storage on a constrained Coupling Facility so that the structure allocation can succeed.

If the structure size is smaller than the minimum size needed, activate a new CFRM policy that defines the SIZE or INITSIZE that at least meets the minimum size required for the structure. Calculate the minimum size needed by converting the *4Kblocks* hexadecimal value to decimal and then multiply the resulting number by 4.

Module: CQSSTS10

CQS0014E STRUCTURE *structurename* INIT FAILURE; *failure reason*.

Explanation: CQS initialization or structure rebuild was unable to initialize a structure. Structure initialization failed for *structurename* on structure connect, structure disconnect, or an access of the structure.

CQS0014E is issued for every CQSGLOBAL mismatch error that is detected. A CQSGLOBAL mismatch can be one or more of the following:

- OVERFLOW STRUCTURE MISMATCH
- SRDS1 MISMATCH
- SRDS2 MISMATCH
- LOG STREAM MISMATCH
- QTYPE COUNT MISMATCH
- XCF GROUP NAME MISMATCH

The *failure reason* is one of the following:

- REQUEST=*func* XES RC=*returncode* RSN=*rsncode*

  An MVS IXL request to connect to the structure, disconnect from the structure, read a control list entry, write a control list entry, lock the control list header, or unlock the control list header failed.

  The possible functions and their meanings are:

  CONN IXLCONN

  DISC IXLDISC

  EVNQ IXLLIST FUNC=MONITOR_EVENTQ

  LOCK IXLLIST FUNC=LOCK

  UNL IXLLIST REQUEST=LOCK(unlock)

  CRT IXLLIST FUNC=READ OR WRITE (to create a control-list entry)

  READ IXLLIST FUNC=READ

RBLD IXLREBLD

The *returncode* is the z/OS cross-system extended services (XES) return code; *rsncode* is the XES reason code. The XES return and reason codes are documented in *OS/390 MVS Programming: Sysplex Services Reference*.

- STRUCTURE NOT DEFINED IN POLICY

  The structure connect failed because the structure is not defined in the coupling facility resource management (CFRM) policy.

- STRUCTURE TOO SMALL

  The shared queues structure is smaller than the minimum structure size defined in the coupling facility resource management (CFRM) policy. CQS abends only if the structure is empty.

  Check the STRMIN value specified in the CQSSGxxx member of PROCLIB to compare the STRMIN value with the structure size specified in the CFRM policy. Determine if the CFRM policy needs to be changed so CQS can allocate a larger shared queues structure. A policy change and a structure rebuild might be necessary to increase the size of the structure.

- OVERFLOW STRUCTURE MISMATCH

  The overflow structure name specified in the OVFLWSTR parameter in PROCLIB member CQSSGxxx does not match the value in the CQSGLOBAL control list entry for the structure. The structure was already allocated when this CQS connected to the structure.

- SRDS1 MISMATCH

  The SRDS1 data set name specified in the SRDSDSN1 parameter in PROCLIB member CQSSGxxx does not match the value in the CQSGLOBAL control list entry for the structure. The structure was already allocated when this CQS connected to the structure.

- SRDS2 MISMATCH

  The SRDS2 data set name specified in the SRDSDSN2 parameter in PROCLIB member CQSSGxxx does not match the value in the CQSGLOBAL control list entry for the structure. The structure was already allocated when this CQS connected to the structure.

- LOG STREAM MISMATCH

  The log stream name specified in the LOGNAME parameter in the CQSSGxxx member of PROCLIB does not match the value in the CQSGLOBAL control list entry for the structure. The structure was already allocated when this CQS connected to the structure.

- QTYPE COUNT MISMATCH

  The QTYPE count values defined locally to this CQS do not match the values in the CQSGLOBAL control list entry for the structure. (QTYPE is an internal value.) This CQS version might be out of sync with the version of the CQS that allocated the structure.

- BPEGETM ERROR

  A request for storage to read the CQSOVERFLOWQNAME control list entry failed.

- BACKLEVEL CF LEVEL

  The coupling-facility level required by this CQS is earlier than the coupling-facility level at which the structure was allocated. This CQS version might be out of synchronization with the version of the CQS that allocated the structure.

- UNACCEPTABLE STRUCTURE ATTRIBUTE

  The connect to the structure succeeded, but one of the structure attributes is not acceptable to CQS. Some examples of unacceptable attributes are:

  – The structure is not persistent.
  – The number of list headers does not match.
  – The structure does not support keys.
  – The structure does not support adjunct areas.
  – The structure does not support data elements.
  – The data element size does not match.

  When CQS detects this error, it disconnects from the structure before abending.

- NO EMCS ALLOCATED

  The connect to the structure succeeded, but no event monitoring controls (EMCs) were allocated because the minimum structure size needed to enable EMCs was greater than the size of the structure allocated. EMCs are required for CQS to notify clients of work on queues. The structure defined in the CFRM policy probably is not large enough to support EMCs.

  When CQS detects this error, it disconnects from the structure before abending.

- XCF GROUP NAME MISMATCH

  The CQSGROUP parameter defining the XCF group name as a CQS execution parameter or in the CQSIPxxx PROCLIB member does not match the value in the CQSGLOBAL control list entry for the structure. The structure was already allocated when this CQS connected to the structure.

- IXLUSYNC SET IN PROGRESS

  The connect to the structure succeeded, but an IXLUSYNC SET event was in progress. CQS was unable to confirm the IXLUSYNC event because of an internal error. When CQS detects this error, it disconnects from the structure before abending. Restart the CQS address space.

System Action: If CQS is initializing when the structure initialization error occurs, CQS terminates with abend U0014. If the structure is being rebuilt when the structure initialization error occurs, the structure rebuild is aborted.

System Programmer Response: If the connect was due to a structure rebuild, analyze the abend subcode or rebuild failure return code in message CQS0242E.

The CQS that first connects to a structure allocates the

structure using the parameters defined to that CQS. Those values are then remembered and must be the same for any other CQS that subsequently connects to the same structure. If the parameter values are different then a MISMATCH error occurs. If the parameter is specified incorrectly on the abended CQS, correct the parameter and restart the CQS.

If the parameter was specified incorrectly on the CQS that allocated the structure, the structure must be deleted and reallocated in order to change the values. To delete a structure, refer to *IMS Version 9: Common Queue Server Guide and Reference*.

The next time CQS initializes, it reallocates the structure and initiates a structure recovery if necessary.

Module: CQSIST20, CQSIST30, CQSSTS10, CQSSTS30

CQS0015E STRUCTURE *strname1* **INIT FAILURE; CHKPTDSN**

CQS0015E DSN=*dsn*

CQS0015E IS FOR CQS *cqsname*, **STRUCTURE** *strname2*

Explanation: The checkpoint data set that CQS was using for this structure contains information for another CQS, another structure, or both. The checkpoint data set must either be initialized for this CQS and structure, or it must be empty.

This message might be issued during CQS initialization or during a CQS system checkpoint if system checkpoint allocates the checkpoint data set and date set validation fails. This occurs only if a prior system checkpoint encountered a data set error that deallocated the checkpoint data set.

This is a three-line message. Each line begins with the message number and ends with the CQS identifier (cqsid) of the CQS being initialized or that is processing the system checkpoint. In the message text:

strname1
: Name of the structure. The structure is being initialized or a system checkpoint is being processed for it.

dsn
: Name of the checkpoint data set

cqsname
: CQS identifier in the checkpoint data set

strname2
: Name of the structure in the checkpoint data set

System Action: If CQS is initializing when the error occurs, CQS terminates with abend U0014. If a system checkpoint is being performed when the error occurs, the system checkpoint is terminated and CQS processing continues.

System Programmer Response: Specify the correct checkpoint data set in the CQSSLxxx PROCLIB member. If necessary, delete and reallocate the specified data set. If the error occurs during a system checkpoint, initiate a CQS system checkpoint immediately after the data set problem is corrected to ensure that CQS has a checkpoint available if a restart is required.

Module: CQSCHK10, CQSIST30

CQS0017E CQSREAD RESYNC ERROR, CQSMOV10 RC = *rc*

CQS0017E LOCK KEY *hex_lock_key*

CQS0017E QNAME *hex_qname* **(***char_qname***)**

CQS0017E UOW1 = *first_half_uow*

CQS0017E UOW2 = *second_half_uow*

Explanation: During the CQSREAD resynchronization process, an error was encountered while moving a data object from the lock queue to the cold queue. The data object is left on the lock queue.

In the message text:

rc
: The return code from CQSMOV10.

hex_lock_key
: The lock key of the data object in hexadecimal.

hex_qname
: The queue name of the data object in hexadecimal.

char_qname
: The queue name of the data object in character.

first_half_uow
: The first half of the unit of work (UOW) of the data object.

second_half_uow
: The second half of the UOW of the data object.

System Action: CQS processing continues.

System Programmer Response: Refer to module CQSMOV10 in “CQS Service Return Codes” on page 25 and correct any error based on the return code in the message. For *rc* = 28, the data object will be moved from the lock queue to the cold queue during the next resynchronization process.

Module: CQSRD030

CQS0018E CQS RESTART FAILED FOR STRUCTURE *structurename*

Explanation: An error occurred during CQS restart processing. The *structurename* is the name of the structure that encountered the error. For certain errors, message CQS0001E is also issued to provide additional information.

System Action: CQS terminates abnormally with abend code U0018.

Module: CQSIST40

CQS0019E CQS RESTART INTERNAL ERROR FOR STRUCTURE *structurename* **RC=***llssrrrr*

Explanation: An error during CQS restart processing might have left one or more UOWs in an in-doubt state. Data objects for the affected UOWs might not have been copied to the coupling facility. In the message text:

structurename
The name of the structure

llssrrrr The error reason code. Refer to "CQS Service Return Codes" on page 25 for a description of these codes.

System Action: CQS processing continues.

System Programmer Response: If you are unable to resolve the problem, copy the SYSLOG and dump of the CQS address space, and call the IBM Support Center for help.

CQS0020I CQS READY

Explanation: CQS initialization completed.

Module: CQSIST00

CQS0021I CQS SHUTDOWN COMPLETE

Explanation: CQS shutdown completed.

Module: CQSTRM00

CQS0030I SYSTEM CHECKPOINT COMPLETE, STRUCTURE *structurename* **LOGTOKEN** *logtoken*

Explanation: CQS took a system checkpoint. In the message text:

structurename
The name of the structure

logtoken
The log token required by CQS to restart from this checkpoint

System Action: CQS processing continues.

System Programmer Response: The operator must use the log token displayed in this message for CQS restart in case of checkpoint data set and coupling facility structure failures. If CQS cannot read the log token from another source, the operator must respond to the CQS0032A message with the log token from the most recent system checkpoint during CQS restart.

Module: CQSCHK10

CQS0031A CONFIRM CQS RESTART FOR STRUCTURE *structurename***, FROM CHECKPOINT LOGTOKEN** *logtoken*

Explanation: CQS could not read the system checkpoint log token from the checkpoint data set, but found a system checkpoint log token in the control entry in the shared queues structure. The system programmer must enter a response. In the message text:

structurename
The name of the structure CQS restart is processing

logtoken
The log token from the control entry

If a system error occurs while formatting this message, the log token is not present in the message text.

System Action: CQS waits for a reply.

System Programmer Response: Enter one of the following responses:

CONFIRM
CQS uses the log token in this message for restart processing.

COLD CQS begins cold start processing.

CANCEL
CQS terminates restart processing with CQS abend 0020, reason code X'00000004'.

logtoken
CQS uses the log token you entered for restart processing for this structure. (Obtain the log token from message CQS0030I.)

Module: CQSIST40

CQS0032A ENTER CHECKPOINT LOGTOKEN FOR CQS RESTART FOR STRUCTURE *structurename*

Explanation: CQS could not read the system checkpoint log token from either the checkpoint data set or from the control entry in the shared queues structure. CQS does not know where to start reading from the log without the log token. The system programmer must enter a response.

In the message text, *structurename* is the name of the structure CQS is processing.

This message is also issued if the required system checkpoint log record was deleted from the log because

a structure checkpoint was successful. A log record that is older than the structure checkpoint log record is deleted during a structure checkpoint. In this case, reply COLD.

If this message is issued the first time CQS is started, reply COLD to perform the initial cold start.

System Action: CQS waits for a reply.

System Programmer Response: Enter one of the following responses.

COLD CQS begins cold start processing.

CANCEL
CQS terminates restart processing with CQS abend 0020, reason code X'00000008'.

logtoken
CQS uses the log token you entered for restart processing for this structure. (Obtain the log token from message CQS0030I.)

Module: CQSIST40.

CQS0033A ENTER CHECKPOINT LOGTOKEN FOR STRUCTURE *structurename* **CLIENT** *clientname* **CQS** *cqsname*

Explanation: One of the following errors occurred:

- CQS could not read the system checkpoint log token for the CQS that was connected to the failed client from the control entry in the shared queues structure. CQS does not know where to start reading from the log without the log token.
- While reading log records for client connect restart processing, CQS encountered an error which prevents CQS from accessing all the required log records.

The system programmer must enter a response.

In the message text:

structurename
The name of the structure that client takeover restart is processing

clientname
The name of the client

cqsname
The CQS identifier of the CQS that was connected to the failed client

System Action: CQS waits for a reply.

System Programmer Response: Enter one of the following responses:

COLD CQS begins client takeover cold start processing.

REJECT
CQS rejects the CQSCONN request with a completion code of X'00000018'.

logtoken
CQS uses the log token you entered for client takeover restart processing for this structure. Obtain the log token of the CQS that was connected to the failed client from message CQS0030I.

CQS attempts to read the log record represented by the log token. If CQS cannot read the log record, message CQS0033A is reissued. If the reason for this message is due to a log error, you might need to choose a response that does not require log records.

Module: CQSCON30.

CQS0034A CANNOT REBUILD STRUCTURE *structurename* **FROM LOG, ENTER COLD, CONTINUE OR CANCEL**

Explanation: During CQS initialization, CQS detected that a structure recovery is required. However, neither structure recovery data sets (SRDS) nor the CQS log stream are valid for structure recovery, and neither SRDS contain valid client data. The CQS log stream does not contain the beginning record of the X'4001' log record. This means that a structure checkpoint had been performed and log records were deleted at that time. Structure recovery cannot be performed with only the log stream because log records that are required for recovery are missing. In the message text, *structurename* is the name of the structure CQS is processing.

System Action: CQS waits for a reply.

System Programmer Response: Enter one of the following responses:

COLD CQS performs a cold start of the structure. All log records and the overflow structure, if one exists, are deleted. CQS is cold started.

CANCEL
CQS ends restart processing with CQS abend 0020, reason code X'0000000C'.

CONTINUE
CONTINUE is not currently available; CONTINUE performs the same action as COLD. Enter COLD.

Module: CQSIST30

CQS0035E CQS SYSTEM CHECKPOINT FAILED, STRUCTURE *structurename***, RC=***nnnnnnnn*

Explanation: CQS system checkpoint processing failed. In the message text:

structurename
The name of the structure.

nnnnnnnn
The return code for the system checkpoint. *nnnnnnnn* indicates the reason for the error:

X'00000004'
CQS was unable to perform a system checkpoint because the restart has not yet completed. A system checkpoint will be initiated upon completion of the restart.

X'00000008'
CQS was unable to perform a system checkpoint because a CQS system checkpoint is already in progress. No action is necessary.

X'0000000C'
CQS was unable to obtain the structure quiesce latch.

X'00000010'
CQS was unable to write the System Checkpoint Begin log record.

X'00000014'
System checkpoint processing for CQSPUT requests failed.

X'00000018'
System checkpoint processing for CQSREAD requests failed.

X'0000001C'
CQS was unable to write the System Checkpoint End log record.

X'00000020'
CQS was unable to open the system checkpoint data set. Refer to CQS0054E to determine why opening the system checkpoint failed. Correct the data set error and initiate a system checkpoint.

X'00000024'
CQS was unable to read the system checkpoint data set. Refer to CQS0054E to determine why reading the system checkpoint failed. Correct the data set error and initiate a system checkpoint.

X'00000028'
CQS was unable to write to the system checkpoint data set. Refer to CQS0054E to determine why writing to the system checkpoint failed. Correct the data set error and initiate a system checkpoint.

X'0000002C'
CQS was unable to close the system checkpoint data set. Refer to CQS0054E to determine why closing the system checkpoint failed. Correct the data set error and initiate a system checkpoint.

X'00000030'
CQS was unable to obtain the lock on the control list header.

X'00000034'
CQS was unable to write the CQSLOCAL control list entry.

X'00000038'
CQS was unable to release the lock on the control list header.

X'0000003C'
CQS was unable to allocate the system checkpoint data set. Refer to CQS0050E to determine why the data set allocation failed. Correct the data set error and initiate a system checkpoint.

X'00000040'
CQS was not able to deallocate the system checkpoint data set. Refer to CQS0050E to determine why the data set allocation failed. Correct the data set error and initiate a system checkpoint.

System Action: CQS processing continues.

System Programmer Response: If you cannot resolve the problem, copy the SYSLOG and the dump of the CQS address space and call the IBM Support Center for help.

Module: CQSCHK10

CQS0050E DYN *type* **FAILED FOR** *ds_type*, **RC=***rrrrrrrr/ssssiiii*

CQS0050E DSN=*dsn*

Explanation: Dynamic allocation or deallocation failed. This is a two-line message. Each line begins with the message number and ends with the CQS identifier (*cqsid*).

type ALLOC for dynamic allocation; UNALLOC for dynamic deallocation

ds_type
The data set type is one of the following:

CHKPTDSN
Identifies the data set as the checkpoint data set in the CQSSLxxx PROCLIB member.

SRDSDSN1
Identifies the data set as the first structure recovery data set in the CQSSGxxx PROCLIB member.

SRDSDSN2
Identifies the data set as the second structure recovery data set in the CQSSGxxx PROCLIB member.

rrrrrrrr The DYNALLOC return code.

ssss The DYNALLOC reason code.

ssss The DYNALLOC information reason code.

dsn Name of the data set CQS was trying to allocate or deallocate.

System Action: If this error occurs during initialization, CQS terminates abnormally. Otherwise, CQS continues processing.

System Programmer Response: Analyze the status of the data set in question. The data set must be a cataloged VSAM data set. For a description of the dynamic allocation or deallocation return and reason codes, see *z/OS MVS Programming: Authorized Assembler Services Guide*.

Module: CQSDYNA0

CQS0054E *service* **FAILED FOR** *ds_type*, **RC=***rrrrrrrr/ssssssss*

CQS0054E DSN=*dsn*

Explanation: A data set failure occurred. This is a two-line message. Each line begins with the message number and ends with the CQS identifier (*cqsid*). In the message text:

service One of the following:

OPEN

READ

WRITE

CLOSE

POINT

ds_type
One of the following:

CHKPTDSN
Identifies the data set as the checkpoint data set in the CQSSLxxx PROCLIB member.

SRDSDSN1
Identifies the data set as the first structure recovery data set in the CQSSGxxx PROCLIB member.

SRDSDSN2
Identifies the data set as the second structure recovery data set in the CQSSGxxx PROCLIB member.

rrrrrrrr The return code from the MVS/DFP™ service.

ssssssss
The reason code from the MVS/DFP service.

dsn The data set name.

System Action: If this error occurs during initialization, CQS terminates abnormally. Otherwise, CQS continues processing.

System Programmer Response: Analyze the status of the data set in question. The data set must be a cataloged VSAM data set. For a description of the return codes, see *MVS/DFP Macro Instructions for Data Sets*. For CQS READ and WRITE data set services errors, see the VSAM GET and PUT macro return codes.

Module: CQSDSS00

CQS0101I CQS CLEANUP SUCCESSFUL

Explanation: CQS resource cleanup completed successfully during termination.

Module: CQSRSM00

CQS0102E CQS CLEANUP FAILURE IN *module*, **RC=***rc* **RSN=***reason status*

Explanation: CQS resource clean up processing failed while trying to cleanup some CQS resources during an address space or TCB termination. In the message:

module The name of the CQS resource manager cleanup module that detected the failure.

rc The return code from the service that failed. If the failure resulted from an abend, then this field contains the string `*ABEND*`.

reason The reason code, if any, from the service that failed. If the failure resulted from an abend, then this field contain the hexadecimal abend code from the abend.

status A text string that indicates the resource cleanup processing that was being done when the failure occurred. If the resource is module is CQSRSM00, then status will be one of the following values:

UNKNOWN
The resource that was being cleaned up could not be determined.

CGIB CLEANUP
The CQS global interface block (CGIB) was being cleaned up.

CQSLOGP0 LOAD
Module CQSLOGP0 (log record purge processor) was being loaded.

CQSLOGP0 PURGE
Module CQSLOGP0 was in the process of purging CQS log records.

SRB CPOOL FREE
The global SRB cell pool was being freed.

ENF DELETE
The ENF LISTENs were being deleted.

System Action: Resource cleanup processing continues with the next resource type. Cleanup for the resource indicated in the status field might be only partially done or might be totally skipped.

System Programmer Response: Save the job log and console log output and contact the IBM Support Center

If the module name in the CQS0102E message is CQSRSM00, and if CQS abnormally terminated, you should perform one of the following actions:

- If the terminating CQS was the only CQS that was running for its set of structures, then immediately restart the CQS.
- If there are other CQSs running, then either immediately restart the terminated CQS, or initiate a structure checkpoint on one of the surviving CQSs. For information on the `/CQCHKPT SHAREDQ` command, see the *IMS Version 9: Command Reference*.

Successfully restarting the failed CQS, taking a structure checkpoint, or both is necessary to preserve the state of the data on the shared queues in the event that a structure rebuild is needed. There might be log records that were not purged to the log from the terminating CQS.

Module: CQSRSM00

CQS0103I CLEANUP SUCCESSFUL: CLIENT=*cccccccc*

Explanation: The CQS resource manager was able to clean up the interface storage associated with the client address space. This message is issued in the client address space. In the message text:

cccccccc
Client name

Module: CQSRSM20

CQS0104W CLEANUP FAILED: CLIENT=*cccccccc***, RSN=***rrr*

Explanation: The CQS resource manager encountered a problem while cleaning up the interface storage associated with the client in the client address space. The reason code indicates the problem. This message is issued in the client address space. In the message text:

cccccccc
Client name

rrr One of the following reason codes:

104 A CGCT block was damaged.

108 The CCIB block was damaged.

10C An error was encountered while releasing the CCIB storage.

110 A CRET block was damaged.

114 An error was encountered while releasing the storage for a CRET block.

118 CQSRSM20 abended for an unknown reason.

11C An unknown error was encountered.

System Programmer Response: This error message indicates that CSA storage might not be available. Contact the IBM Support Center.

Module: CQSRSM20

CQS0105I INTF CLEANUP SUCCESSFUL: CLIENT=*cccccccc*

Explanation: The CQS resource manager was able to drive the client event exit and post or resume all outstanding CQS requests from the client. In the message text:

cccccccc
Client name

Module: CQSRSM10

CQS0106W INTF CLEANUP FAILED: CLIENT=*cccccccc***, RSN=***rrr*

Explanation: When the CQS address space terminated, the CQS resource manager monitoring CQS for the client failed in a phase of its cleanup. The reason code indicates the problem that was encountered. In the message text:

cccccccc
Client name

rrr One of the following reason codes:

104 The resource manager was unable to obtain common storage for a CXSH block to notify the client that CQS terminated.

108 The resource manager was unable to schedule an SRB to the client address space to notify the client that CQS terminated.

10C The resource manager was unable to schedule an SRB to the client address space to clean up the CQS interface blocks.

110 An abend occurred in the resource manager (CQSRSM10).

System Programmer Response: If the client address space terminates before the CQS resource manager completes processing, you might receive message CQS0106W with reason code 108 or 10C. In this case, other CQS resource managers have cleaned up CQS interface storage, and no action is required.

In all other cases, contact the IBM Support Center. If you receive reason code 110, print the records in SYS1.LOGREC for information on the abend.

Module: CQSRSM10

CQS0110W CLIENT *client_id* **EXIT SRB ABEND** *abend_code* **PSW=***psw* **R15=***r15* **CQSSRB10=***srb10_addr* **EXIT=***exit_addrstatus*

Explanation: CQS scheduled an SRB to the address space of client *client_id* to drive a CQS client exit. Either the CQS SRB routine or the client exit abended. In the message text:

client_id
The 8-character CQS client ID of the client that abended.

abend_code
The abend that occurred (Sxxx for system abends and Uxxxx for user abends).

psw The PSW (program status word) contents at the time of abend.

r15 The contents of register 15 at the time of abend. For some abends, this is the abend subcode.

srb10_addr
The address of CQS module CQSSRB10. CQSSRB10 is the CQS SRB routine that is scheduled into the client's address space.

exit_addr
The address of the client exit being called.

status A text string that indicates where the abend occurred during client exit processing. The status field can have one of the following values:

BEFORE EXIT
The abend occurred before the client exit was called.

IN EXIT
The abend occurred while the client exit was in control.

AFTER EXIT
The abend occurred after the client exit returned.

This message is issued in the client address space.

System Action: When the client-exit SRB abends, CQS does not abnormally terminate either the client or the CQS address space, nor does it take a dump. The SRB's functional recovery routine (FRR) takes the following actions before returning to z/OS:

- Issues the CQS0110W message
- Produces an SDUMP of the client and CQS address spaces
- Attempts to clean up an CQS and client storage associated with the request

The FRR records diagnostic information about the abend in the LOGREC data set.

System Programmer Response: Save a copy of the dump produced and save or print a copy of the LOGREC records pertaining to this abend. If the status field in this message is a value other than *IN EXIT* and the client is an IBM product (for example, IMS), contact the IBM Support Center. If the status field is *IN EXIT* and the client is not an IBM product, contact the supplier of the client.

Module: CQSRSM00

CQS0111W CQS INTERFACE ABEND *abend_code* **PSW=***psw* **R15=***r15***module=***module_addrstatus*

Explanation: An abend occurred in the interface between the client and CQS during the processing of a CQS request. In the message text:

abend_code
The abend that occurred (S*xxx* for system abends and U*xxxx* for user abends).

psw The PSW (program status word) contents at the time of abend.

r15 The contents of register 15 at the time of abend. For some abends, this is the abend subcode.

module The name of the CQS interface module that detected the abend. This is not necessarily the module that abended; it is the module whose recovery routine (ESTAE or FRR) was driven because of the abend. Possible values of this field are:

CQSREG00
The abend occurred during registration with CQS.

CQSREG20
The abend occurred during registration with CQS.

CQSRQS00
The abend occurred on the input side of the interface. The input side of the interface sends the request to the CQS address space.

CQSSRB00
The abend occurred on the output side of the interface. The output side of the interface returns the result of a CQS request back from CQS to the client.

module_addr
The address of the detecting module.

status A text string that indicates where the abend occurred during client exit processing. This status field is not present for all modules issuing this message.

If *module* is CQSREG00 or CQSREG20, *status* will be blank. If *module* is CQSRQS00, *status* can have the following values:

BEFORE COPY
The abend occurred before the request data was copied to the CQS address space.

IN COPY
The abend occurred during the process of copying the request data to the CQS address space. The abend is likely due to bad data passed from the client.

IN ENQUEUE
The abend occurred while the request was being enqueued to the CQS address space.

AFTER COPY
The abend occurred after the copy and enqueue of the request to the CQS address space.

STATUS UNKWN
The FRR could not determine the status of the request when the abend occurred.

If *module* is CQSSRB00, *status* can have the following values:

BEFORE COPY
The abend occurred before the request data was copied to the client address space.

IN COPY
The abend occurred during the process of copying the request data to the client address space. The abend is likely due to bad data passed from the client.

AFTER COPY
The abend occurred after the request data was copied to the client address space.

IN POST
The abend occurred while the client was being posted (or resumed) to wake it up after a request had completed.

STATUS UNKWN
The FRR could not determine the status of the request when the abend occurred.

System Action: When an abend occurs in the request interface, the interface's functional recovery routine receives control from z/OS. The FRR will analyze the abend, will take appropriate recovery action, and gather diagnostic data.

CQS interface abends can have several causes:

- Invalid data passed by the client program
- Errors in the interface modules
- Environmental errors (such as overlaid control blocks or storage problems)
- Problems in CQS resource cleanup for a terminated CQS, or timing conditions for a CQS that is currently going through termination

The last cause in the list above can occur when a CQS address space is forced to terminate, and certain CQS resources were not cleaned up. It can also occur when a CQS is terminating at the same time a request is being issued. In these cases, abends can occur because the interface is attempting to call the CQS address space when it no longer exists. For these types of abends, the interface FRR recovers and returns a return code that indicates that CQS is not available, and does not issue a CQS0111W message or SDUMP.

For all other abend cases, the interface FRR will issue the CQS0111W message and will produce an SDUMP of the client, and the CQS address space, if possible. The FRR will also log diagnostic information to the LOGREC data set, and will attempt to clean up resources associated with the request.

If the abend occurred at a point where the FRR can safely retry, it will retry and return a nonzero return code to the client. If the abend occurred at a point where recovery is not possible because the status of the request is unknown or because retrying could cause loss of data integrity, the abend will not be retried. In these cases, the client may be abended, or the request may never complete.

System Programmer Response: Save a copy of the dump produced and save or print a copy of the LOGREC records pertaining to this abend. If the client is an IBM product (for example, IMS), contact the IBM Support Center. If the client is not an IBM product, contact the supplier of the client.

Module: CQSREG00, CQSREG20, CQSRQS00, CQSSRB00

CQS0112I SDUMP FAILED FOR *abend* ABEND, RC=*rc*, RSN=*rsn*

Explanation: CQS issued an SDUMP call to z/OS to produce a dump of the address space after an abend, but the SDUMP was not successful.

In the message text:

abend The abend code for which the dump was taken. For system abends, the format of code is S*xxx*, where *xxx* is the 3-digit abend code in hexadecimal. For user abends, the format of code is U*dddd*, where *dddd* is the 4-digit abend code in decimal.

rc The return code from the MVS SDUMP macro.

rsn The reason code from the MVS SDUMP macro.

System Action: The SDUMP is skipped.

System Programmer Response: Use the return and reason codes from the MVS SDUMP macro to determine the cause of the SDUMP failure. These return and reason codes are documented in *z/OS MVS Programming: Authorized Assembler Services Reference, Volume 3*. If appropriate, correct the cause of the failure so that future dumps are not lost.

Module: CQSRQS00, CQSRSM00, CQSSRB00, CQSSRB10

CQS0113I DAE SUPPRESSED DUMP FOR *abend* ABEND

Explanation: CQS issued an SDUMP call to z/OS to produce a dump of the address space after an abend, but the SDUMP was suppressed by z/OS dump analysis and elimination (DAE).

CQS recovery routines gather symptom string data related to an abend, and provide this data to z/OS when an SDUMP is requested. If DAE is enabled, z/OS will suppress duplicate dumps, for example, dumps that have symptom strings identical to previously captured dumps. DAE is controlled through the MVS ADYSETxx PARMLIB member and the MVS SET DAE command. For details on specifying DAE options, see *z/OS MVS Initialization and Tuning Guide*.

In the message text:

abend The abend code for which the dump was taken. For system abends, the format of code is S*xxx*, where *xxx* is the 3-digit abend code in hexadecimal. For user abends, the format of code is U*dddd*, where *dddd* is the 4-digit abend code in decimal.

System Action: The SDUMP is skipped. Note that a CQS-generated dump will be suppressed if its symptom string matches a previous dump, and if the current DAE setting in ADYSETxx is either SUPPRESS OR SUPPRESSALL.

System Programmer Response: None.

Module: CQSRQS00, CQSRSM00, CQSSRB00, CQSSRB10

CQS0114E CQS RESMGR ABEND *abend_code* PSW=*psw* RSN=*reason module*=*modaddr status*

Explanation: An abend occurred in a CQS resource manager cleanup module during resource cleanup processing. In the message text:

abend_code
The abend that occurred (S*xxx* for system abends, U*xxxx* for user abends).

psw The PSW (program status word) contents at the time of abend.

reason The abend reason code, or `N/A` if no reason code is available.

module The name of the CQS resource module that detected the abend. This is not necessarily the module that abended; it is the module whose recovery routine (ESTAE) was driven because of the abend.

modaddr
The address of the detecting module.

status A text string that indicates the resource cleanup processing that was being done when the abend occurred. If the resource is module CQSRSM00, then status will be one of the following values:

UNKNOWN
The resource that was being cleaned up could not be determined.

CGIB CLEANUP
The CQS global interface block (CGIB) was being cleaned up.

CQSLOGP0 LOAD
Module CQSLOGP0 (log record purge processor) was being loaded.

CQSLOGP0 PURGE
Module CQSLOGP0 was in the process of purging CQS log records.

SRB CPOOL FREE
The global SRB cell pool was being freed.

ENF DELETE
The ENF LISTENs were being deleted.

System Action: The resource manager cleanup routine's recovery routine will save data in SYS1.LOGREC and will take a dump to capture problem diagnostic data. The recovery routine will then give control back to the resource manager so that it can

continue resource cleanup processing.

Programmer Response: Save the dump produced and save or print a copy of the SYS1.LOGREC records pertaining to this abend, then contact the IBM Support Center.

Module: CQSRSM00

CQS0115E ABEND RECURSION DETECTED IN *module* - RETRY WILL BE SKIPPED

Explanation: A CQS recovery routine detected abend recursion (abending in the same location over and over, or an excessive number of abends within the same routine). The recovery routine will no longer retry the abend to prevent this recursion from continuing.

In the message text, *module* is the name of the CQS module with the recovery routine that detected the abend recursion.

System Action: The recovery routine will not attempt to retry (recover from) the current abend. Instead, it will move the abend to the next recovery routine (if any), which might result in the termination of the address space.

Programmer Response: Save any dump produced and save or print a copy of the data in SYS1.LOGREC, and contact the IBM Support Center.

Module: CQSRSM00

CQS0200I STRUCTURE *structurename* QUIESCED FOR *quiesce reason*

Explanation: CQS quiesced the structure because a structure process was started. CQS does not permit activity on a quiesced structure. In the message text:

structurename
The name of the structure CQS quiesced

quiesce reason
One of the following structure processes:

OVERFLOW THRESHOLD PHASE 1
OVERFLOW THRESHOLD PHASE 2
OVERFLOW SCAN START
OVERFLOW SCAN END
STRUCTURE CHECKPOINT
STRUCTURE DUPLEXING
STRUCTURE REBUILD
STRUCTURE DUPLEXING

System Action: CQS processing continues, but activity on the structure is not permitted.

Module: CQSSTE00, CQSSTE10, CQSSTE20

CQS0201I STRUCTURE *structurename* RESUMED AFTER *quiesce reason*

Explanation: CQS resumed the quiesced structure after a structure process completed. In the message text:

structurename
The name of the structure CQS resumed

quiesce reason
One of the following structure processes:

OVERFLOW THRESHOLD PHASE 1
OVERFLOW THRESHOLD PHASE 2
OVERFLOW SCAN START
OVERFLOW SCAN END
STRUCTURE CHECKPOINT
STRUCTURE DUPLEXING
STRUCTURE REBUILD
STRUCTURE DUPLEXING

System Action: CQS processing continues and activity on the structure is again permitted.

Module: CQSSTE10, CQSSTR00, CQSSTE20

CQS0202I STRUCTURE *structurename* STATUS CHANGED; STATUS= *structure status*

Explanation: If a CQS loses connectivity to a structure, or CQS regains connectivity to a structure, or the structure fails, CQS0202I is issued to indicate a status change. In the message text:

structurename
The name of the structure whose status changed

structure status
One of the following:

CONNECTION
CQS was able to connect to the structure after a connection was lost.

LOST CONNECTION
A CQS lost connectivity to the structure.

STRUCTURE FAILURE
A structure failure occurred.

System Action: CQS processing continues.

Module: CQSSTE00, CQSSTR00

CQS0205E STRUCTURE *structurename* IS FULL

Explanation: The specified structure is full. No new data objects can be placed on the structure until some data objects are removed.

This message is issued the first time CQS reaches the structure-full condition. It is only issued again if CQS

goes out of overflow mode, goes back into overflow mode, and again reaches a structure-full condition. In the message text:

structurename
The name of the structure that is full

For a resource structure, this message is issued if a CQSUPD request of a resource list entry failed because the resource structure is full. Only the first such failure within the resource update list causes this message to be displayed. There will be at most one CQS0205E message for a resource update list.

System Action: CQS processing continues.

System Programmer Response: Take an action that will remove data objects from the structure. Also, consider running with an overflow structure, if you are not already doing so.

Module: CQSPUT00, CQSPUT20, CQSMOV10, CQSSTS20, CQSUPD00

CQS0206I CQS *structurename percentage* BELOW THRESHOLD LEVEL

Explanation: The CQS structure space utilization has fallen the stated percentage below the threshold level. The structure was not eligible for overflow processing because the previous threshold process did not move any queues to the overflow structure. When this message is issued, the structure becomes eligible for threshold processing.

In the message text:

structurename
The name of the structure for which space utilization has fallen below the threshold level.

percentage
The percentage below the threshold level for which this structure space utilization has fallen.

System Action: CQS processing continues. The named structure is now eligible for threshold processing.

Module: CQSDEL10, CQSMOV10

CQS0210I STRUCTURE *strname* REPOPULATION REQUESTED

Explanation: The resource structure failed. CQS successfully allocated a new structure and requested that its clients repopulate the structure.

In the message text, *strname* is the resource structure name.

System Action: CQS notified its clients to repopulate the structure in their structure vent exits.

Programmer Response: None.

Module: CQSSTE30

CQS0220I CQS *cqsname* STARTED STRUCTURE CHECKPOINT FOR STRUCTURE *structurename*

Explanation: A structure checkpoint is being taken. All of the CQSs connected to the structure issue this message if a structure checkpoint is started. In the message text:

structurename
The name of the structure that CQS will checkpoint

cqsname
The name of the CQS that is master of the structure checkpoint

System Action: CQS processing continues.

Module: CQSSTE10

CQS0221I CQS *cqsname* COMPLETED STRUCTURE CHECKPOINT FOR STRUCTURE *structurename*

Explanation: Structure checkpoint processing completed. All of the CQSs connected to the structure issue this message if the structure checkpoint succeeds. In the message text:

structurename
The name of the structure that CQS checkpointed

cqsname
The name of the CQS that is master of the structure checkpoint

System Action: CQS processing continues.

Module: CQSSTE10

CQS0222E CQS *cqsname* FAILED STRUCTURE CHECKPOINT FOR STRUCTURE *structurename* RC=*xxnnnnnn*

Explanation: The structure checkpoint failed. All CQSs connected to the structure issue this message. In the message text:

cqsname
The name of the CQS that is master of the structure checkpoint

structurename
The name of the structure that CQS attempted to checkpoint

xxnnnnnn
The return code for the structure checkpoint, where *xx* indicates one of the following modules that detected the error, and *nnnnnn* indicates the reason for the error:

X'10' CQSSTE10

X'30' CQSCHK30

X'40' CQSCHK40

X'60' CQSCHK60

X'FF' CQSSTE00

The *xxnnnnnn* can be one of the following:

X'10020000'
The CQS structure checkpoint process in this CQS was unable to obtain the structure quiesce latch. Structure checkpoint processing for this CQS ends.

If unable to obtain the latch, the master CQS handles the error in one of the following ways:

- CQS0222E RC=10020000 and abends U0100-00000004
- CQS0222E RC=10020000 and CQS0222E RC=30000098, and ends the structure checkpoint process.

If a participant CQS is unable to obtain the latch and it abends U0100-00000004, the master CQS continues with structure checkpoint processing. If this CQS does not abend, the master CQS ends the structure checkpoint process.

See related reason codes 10220000 and 30000098.

X'10220000'

The CQS structure checkpoint process in another CQS was unable to obtain the structure quiesce latch. This is a propagated error. Structure checkpoint processing for this CQS ends. If the error is propagated to the master CQS, it will not issue a CQS0222E RC=10220000; the master CQS ends the structure checkpoint process and issues CQS0222E RC=30000098.

See related reason codes 10020000 and 30000098.

X'30000004'
The CQS was unable to perform a structure checkpoint because another CQS is already performing structure checkpoint processing. This attempt at a structure checkpoint is terminated since the structure will be checkpointed by another CQS. No action is necessary. The CQS0220 message is not issued prior to this error message.

X'30000008'
The CQS was unable to perform a structure checkpoint because a structure recovery is required. This attempt at a structure checkpoint is terminated. A structure checkpoint will be initiated by CQS after structure recovery is complete. No action is necessary.

X'3000000C'
The CQS structure checkpoint was unable to obtain CQS termination latch. Structure checkpoint processing ends. The CQS0220 message is not issued prior to this error message.

X'30000010'
The CQS structure checkpoint was unable to obtain structure quiesce latch. Structure checkpoint processing ends. The CQS0220 message is not issued prior to this error message.

X'30000020'
The CQS structure checkpoint was unable to obtain lock on control list header. Structure checkpoint processing ends. The CQS0220 message may or may not have been issued prior to this error message.

X'30000024'
The CQS structure checkpoint was unable to read CQSSTRCHKPTINPRG control list entry. Structure checkpoint processing ends.

X'30000028'
The CQS structure checkpoint was unable to read CQSOVERFLOW control list entry. Structure checkpoint processing ends.

X'3000002C'
The CQS is currently in overflow threshold or overflow scan processing. This attempt at a structure checkpoint is terminated. A structure checkpoint will be initiated by CQS after overflow processing is complete. No action is necessary.

X'30000030'
The CQS structure checkpoint was unable to write CQSOVERFLOW control list entry. Structure checkpoint processing ends. The CQS0220 message is not issued prior to this error message.

X'30000034'
The CQS structure checkpoint was unable to write CQSSTRCHKPT control list entry. Structure checkpoint processing ends.

X'30000038'
The CQS structure checkpoint was unable to write CQSSTRCHKPTINPRG control list entry. Structure checkpoint processing ends. The CQS0220 message is not issued prior to this error message.

X'3000003C'
The CQS structure checkpoint was unable to delete CQSSTRCHKPTINPRG control list entry. Structure checkpoint processing ends.

X'30000040'
The CQS structure checkpoint was unable to release lock on control list header. Structure

checkpoint processing ends. The CQS0220 message may or may not have been issued prior to this error message.

X'30000050'
The CQS structure checkpoint was unable to allocate a structure recovery data set. Structure checkpoint processing ends. Refer to the CQS0050E message to determine why the data allocation failed.

X'30000054'
The CQS structure checkpoint was unable to open a structure recovery data set. Structure checkpoint processing ends. Refer to the CQS0054E message to determine why the open failed. Correct the data set error and initiate a new structure checkpoint.

X'30000058'
The CQS structure checkpoint was unable to allocate a buffer (via BPEGETM) to read/write the SRDS control record. Structure checkpoint processing ends.

X'3000005C'
The CQS structure checkpoint was unable to read the structure recovery data set control record. Structure checkpoint processing ends. Refer to the CQS0054E message to determine why the open failed. Correct the data set error and initiate a new structure checkpoint.

X'30000060'
The CQS structure checkpoint was unable to write the structure recovery data set control record. Structure checkpoint processing ends. Refer to the CQS0054E message to determine why the open failed. Correct the data set error and initiate a new structure checkpoint.

X'30000064'
The CQS structure checkpoint was unable to close a structure recovery data set. Structure checkpoint processing ends. Refer to the CQS0054E message to determine why the close failed. Correct the data set error and initiate a new structure checkpoint.

X'30000068'
The CQS structure checkpoint was unable to unallocate a structure recovery data set. Structure checkpoint processing ends. Refer to the CQS0050E message to determine why the data allocation failed. Correct the data set error and initiate a new structure checkpoint.

X'30000080'
The CQS structure checkpoint was unable to initialize the data space. Structure checkpoint processing ends.

X'30000084'
The CQS structure checkpoint was unable to write the Structure Checkpoint Begin log record. Structure checkpoint processing ends.

X'30000088'
The CQS structure checkpoint was unable to write the Structure Checkpoint End log record. Structure checkpoint processing ends.

X'3000008C'
The CQS structure checkpoint was unable to allocate an AWE (via BPECBGET). Structure checkpoint processing ends.

X'30000090'
The CQS structure checkpoint was unable to enqueue an AWE (via BPEAWSRV) to the IXLUSYNC processor. Structure checkpoint processing ends.

X'30000094'
The CQS structure checkpoint was unable to enqueue an AWE (via BPEAWSRV) to the CQSCHK60. Structure checkpoint processing ends.

X'30000098'
The CQS structure checkpoint was unable to quiesce the structure. One or more CQSs were unable to obtain the structure quiesce latch. Structure checkpoint processing ends. The CQSs that could not obtain the latch issue message CQS0222E RC=10020000.

See related reason codes 10020000 and 10220000.

X'3000009C'
The CQS structure checkpoint was unable to create thread for CQSCHK40. Structure checkpoint processing ends.

X'300000F0'
The CQS is terminating and a structure checkpoint was requested. This attempt at a structure checkpoint is terminated since the structure will be checkpointed by another CQS.

X'40000004'
The CQS structure checkpoint encountered an error when it attempted to read from the structure. The IXLLIST request failed because CQS is not connected to the structure. This error may occur when the connection fails and CQS is unable to rebuild the structure. In this case CQS may have disconnected from the structure and the structure is inaccessible. Structure checkpoint processing ends.

X'40000008'
The CQS structure checkpoint encountered an error when it attempted to read from the structure. The IXLLIST request failed because the structure failed. Structure checkpoint processing ends.

X'4000000C'
The CQS structure checkpoint encountered an error when it attempted to read from the structure. The IXLLIST request failed with an unexpected return and reason code. Structure checkpoint processing ends.

X'40000010'
The CQS structure checkpoint called CQSCHK50 to perform a GETBUF request. The request was unsuccessful. Structure checkpoint processing ends.

X'40000014'
The CQS structure checkpoint called CQSCHK50 to perform a BUFCMPLT request. The request was unsuccessful. Structure checkpoint processing ends.

X'60000004'
The CQS structure checkpoint was unable to allocate a buffer (via BPEGETM) to write data to the structure recovery data set. Structure checkpoint processing ends.

X'60000008'
The CQS structure checkpoint was unable to release a buffer (via BPEFREEM). Structure checkpoint processing ends.

X'6000000C'
The CQS structure checkpoint was unable to write to the structure recovery data set. Structure checkpoint processing ends. Refer to the CQS0054E message to determine why the put failed. Correct the data set error and initiate a new structure checkpoint.

X'60000010'
The CQS structure checkpoint encountered an error processing a TERMWRT request from module CQSCHK60. The module found an extent block that needed to be written, however, the sequence number in the extent block was not the correct sequence number.

X'60000014'
The CQS structure checkpoint encountered an error processing a TERMWRT request from module CQSCHK60. The module found that extent blocks that should have been written to the SRDS were still on an internal WRITE PENDING queue.

X'FF000004'
The CQS structure checkpoint master failed between phase 1 and 2. The master *cqsname* is the CQS that took over the structure checkpoint. This attempt at a structure checkpoint is unsuccessfully ended and a new one is initiated. No action is necessary.

X'FF000008'
The CQS structure checkpoint master failed between phase 2 and 3. The master *cqsname* is the CQS that took over the structure checkpoint. This attempt at a structure checkpoint is unsuccessfully ended and a new one is initiated. No action is necessary.

X'FF00000C'
The CQS structure checkpoint master failed between phase 1 and 2. No CQS was connected to the structure at the time, so the structure checkpoint could not be taken over. The *cqsname* in the message is the identifier of the CQS that detected the failure after it reconnected the structure. This attempt at a structure checkpoint is unsuccessfully ended. No new structure checkpoint is initiated.

X'FF000020'
This CQS lost connectivity to the structure between phase 1 and 2 of structure checkpoint. *cqsname* is the identifier of the CQS that lost connectivity. Structure checkpoint unsuccessfully ended for this CQS. If this CQS was not the structure checkpoint master, structure checkpoint continues for all CQSs that still have connectivity to the structure.

System Action: CQS processing continues.

System Programmer Response: If you are unable to resolve the problem, copy the SYSLOG and dump of the master CQS address space, and call the IBM Support Center for help.

Module: CQSCHK30, CQSSTE10

CQS0240I CQS *cqsname* STARTED STRUCTURE *rebuildtype* FOR STRUCTURE *structurename*

Explanation: CQS started an MVS cross-system extended services (XES) structure rebuild to recover or copy queues. The master CQS determines the type of rebuild and performs the rebuild. Other CQSs connected to the structure participate in the structure rebuild, but do not actually recover or copy the queues. All of the CQSs connected to the structure issue this message if a structure rebuild is started.

Structure recovery entails recovering the queues from the structure recovery data set and z/OS system log. Structure copy entails copying the queues from one list structure to another. In the message text:

cqsname
Name of the CQS that is master of the structure rebuild

structurename
The name of the structure CQS will rebuild

rebuildtype
The type of structure rebuild being performed, either RECOVERY or COPY

System Action: CQS processing continues.

Module: CQSSTR00

CQS0241I **CQS** *cqsname* **COMPLETED STRUCTURE** *rebuildtype* **FOR STRUCTURE** *structurename*

Explanation: CQS completed an MVS cross-system extended services (XES) structure rebuild to recover or copy queues. All of the CQSs connected to the structure issue this message if a structure rebuild completes. In the message text:

structurename
The name of the structure CQS just rebuilt

rebuildtype
Type of structure rebuild that failed, either COPY or RECOVERY

cqsname
The name of CQS that is master of the structure rebuild process

System Action: CQS processing continues.

Module: CQSSTR00

CQS0242E **CQS** *cqsname* **FAILED STRUCTURE** *rebuildtype* **FOR STRUCTURE** *structurename* **RC=***llssrrrr*

Explanation: The rebuild failed for the list structure to either copy the queues to a new structure or recover the queues from a structure recovery data set and the z/OS system log. All of the CQSs connected to the structure issue this message if a structure rebuild fails. In the message text:

cqsname Name of the CQS that was master of the structure rebuild. This field is blank when CQS does not yet know the master of the rebuild.

structurename The name of the structure CQS attempted to rebuild.

rebuildtype The type of structure rebuild that failed, either COPY or RECOVERY.

llssrrrr Refer to “CQS Restart and Rebuild Reason Codes” on page 18 for a description of these reason codes.

System Action: CQS processing continues.

System Programmer Response: The structure must be recovered before work can be processed on the structure. Correct the problem and initiate another rebuild by entering the `SETXCF START,REBUILD` command on the z/OS console.

If the new structure was full or failed, analyze the use of the coupling facility to determine if the coupling facility resource management (CFRM) policy needs to be changed so CQS can allocate a large enough shared queues structure on a coupling facility that can accommodate it. A policy change and a structure rebuild might be necessary to recover the structure.

If the rebuild structure initialization failed, correct the problem documented in message CQS0014E and initiate another rebuild.

If you are unable to resolve the problem, copy the SYSLOG and dump of the master CQS address space, and call the IBM Support Center for help.

Module: CQSSTR00

CQS0243E **UNABLE TO PARTICIPATE IN REBUILD FOR STRUCTURE** *structurename*

Explanation: CQS is unable to participate in a rebuild of the structure because it is unable to connect to the rebuild structure. CQS does not know the master of the rebuild process or the type of rebuild being done (structure recovery or structure copy). This CQS issues message CQS0243E instead of messages CQS0240I and CQS0241I or CQS0242E. If the structure is successfully rebuilt, this CQS will not have access to it.

System Action: CQS processing continues.

System Programmer Response: If the rebuild is successful, consider initiating another rebuild if you want this CQS to have access to the structure.

Module: CQSSTE00

CQS0244E **STRUCTURE RECOVERY REQUIRED AFTER RECOVERY FAILURE FOR STRUCTURE** *structurename*

Explanation: Recovery failed for the identified structure.

System Action: CQS processing continues.

System Programmer Response: Try another rebuild to recover the structure by issuing the `SETXCF START,REBUILD` request on the z/OS console. Work is permitted on the structure, but some or all of the work that occurred before the rebuild is unavailable until the structure is recovered. Structure processes such as structure checkpoint and structure overflow processing are not permitted until the structure is successfully recovered.

Module: CQSSTR00

CQS0245E **STRUCTURE** *structurename* **REBUILD ERROR**

CQS0245E *error detail* **RC=***rc* **RSN=***rsn*

CQS0245E CLNTQ=*client_queue_name*

CQS0245E UOW1=*first_half_uow*

CQS0245E UOW2=*second_half_uow*

Explanation: Structure rebuild encountered an error processing a data object. This message provides details about the error and the data object that rebuild was processing. CQS0245E contains five lines. In the message text:

structurename
The name of the structure being rebuilt.

errordetail
Detail about the error. The details can be up to 15 characters. One possible error detail might be CQSUNLCK FAILED (a CQSUNLCK request failed).

rc Return Code. One possible return code might be XLLISTREQUEST=MOVE.

rsn Reason code. One possible reason code might be XLLISTREQUEST=MOVE.

client_queue_name
Name of the client queue associated with the data object.

first_half_uow
First half of the UOW of the data object.

second_half_uow
Second half of the UOW of the data object.

System Action: CQS continues performing structure rebuild.

System Programmer Response: Report this error to IBM. Copy the SYSLOG, IMS log records, CQS log records and the dump of the CQS address space, and call the IBM Support Center for help.

Module: CQSMOV20

CQS0260I CQS *cqsname* **STARTED OVERFLOW THRESHOLD PROCESSING FOR STRUCTURE** *structurename*

Explanation: CQS started overflow threshold processing, because the structure reached the overflow threshold specified by the installation. Queues are selected to enter overflow mode. All of the CQSs connected to the structure issue this message if structure overflow processing completes. In the message text:

cqsname
Name of the CQS that is master of the overflow threshold process

structurename
The name of the structure undergoing overflow threshold processing

System Action: CQS processing continues. The structure is quiesced until overflow threshold processing completes or fails.

Module: CQSSTE10, CQSSTR00

CQS0261I CQS *cqsname* **COMPLETED OVERFLOW THRESHOLD PHASE 1 FOR STRUCTURE** *structurename*

Explanation: CQS completed overflow threshold phase 1 for the structure. Structure activity for the primary structure is resumed. Queue names that are in overflow or were selected for overflow are still quiesced. All of the CQSs connected to the structure issue this message. In the message text:

cqsname
The name of CQS that is master of the overflow threshold process

structurename
The name of the structure that completed overflow threshold phase 1

System Action: CQS processing continues. Primary structure activity can be resumed. Overflow activity is still quiesced.

Module: CQSSTE10

CQS0262I CQS *cqsname* **COMPLETED OVERFLOW THRESHOLD PHASE 2 FOR STRUCTURE** *structurename*

Explanation: CQS completed overflow threshold phase 2 for the structure. Structure activity for queue names that are in overflow or were selected for overflow are resumed. All of the CQSs connected to the structure issue this message. In the message text:

cqsname
The name of CQS that is master of the overflow threshold process

structurename
The name of the structure that completed overflow threshold phase 2

System Action: CQS processing continues. Overflow structure activity can be resumed.

Module: CQSSTE10

CQS0263E CQS *cqsname* **FAILED OVERFLOW THRESHOLD PROCESSING FOR STRUCTURE** *structurename* **RC=***xxxxxxxx*

Explanation: Overflow threshold processing failed for the structure. In the message text:

cqsname
Name of the CQS that was master of overflow threshold processing.

structurename
The name of the structure for which CQS attempted overflow threshold processing.

xxxxxxxx
The reason code.

Reason Code	Explanation
X'00000008'	The CQS overflow threshold process encountered an error when it attempted to access the structure while the structure was quiesced between overflow threshold IXLUSYNC 1 and IXLUSYNC 2. The IXLLIST request failed either because CQS is not connected to the structure or because the structure failed. The master CQS issues IXLUSYNC 2 to resume the structure so that rebuild can process. If rebuild is successful, overflow threshold processing continues after the rebuild and no action is necessary. If the rebuild fails, overflow threshold processing does not resume.
X'0000000C'	The CQS overflow threshold master failed between IXLUSYNC 1 and IXLUSYNC 2. The master *cqsid* in the message is the identifier of the CQS that took over the overflow threshold process. This attempt at a overflow threshold processing is terminated and a new one is initiated. No action is necessary.
X'00000010'	The CQS overflow threshold process was unable to allocate a buffer (through BPEBPGET) during Phase 1. Overflow threshold processing ends.
X'00000014'	The CQS overflow threshold process was unable to write either the Overflow Threshold Begin or Move to Overflow log record. Overflow threshold processing ends.
X'00000018'	The CQS overflow threshold process attempted to translate a queue type into a list header number during Phase 1. The CQS service CQSLHS indicated the queue type was invalid. Overflow threshold processing ends.
X'0000001C'	The CQS overflow threshold process encountered an error when it attempted to access the structure during Phase 1. This may have been a failure that required a rebuild, but the rebuild was either not initiated or it failed. Overflow threshold processing ends.
X'00000020'	The CQS overflow threshold process was unable to quiesce the structure. One or more CQSs were unable to obtain the structure quiesce latch. Overflow threshold processing ends.
X'00000024'	No queue names were selected for overflow. This could happen because the Queue Overflow exit routine did not allow any queue names to be selected for overflow. It could also happen if all the data objects on the structure are in CQS private queues or client queue types that are not eligible for overflow. Overflow threshold processing ends and will not be allowed to occur until the structure size is 20% below the overflow threshold.
X'00000028'	The CQS overflow threshold process encountered an error while attempting to obtain a resource latch during Phase 1. Overflow threshold processing ends.
X'0000002C'	This CQS lost connectivity to the structure between overflow threshold IXLUSYNC 1 and 2. The *cqsid* in the message is the identifier of the overflow master CQS. Structure overflow threshold processing unsuccessfully ends for this CQS. If this CQS was the overflow master, another CQS that has connectivity to the structure, if any exist, will take over the overflow process. If this CQS was not the overflow master, overflow threshold continues for all CQSs that still have connectivity to the structure.
X'00000040'	The CQS overflow threshold process in this CQS could not obtain the structure quiesce latch. The overflow threshold process for this CQS ends. If it cannot obtain the structure quiesce latch, the master CQS issues either: • CQS0263E with RC=X'00000040' and abends with U0100-00000004 • CQS0263E with RC=X'00000040' and CQS0263E with RC=X'00000020' And then the master CQS ends the overflow threshold process. If a participant CQS cannot obtain the structure quiesce latch and it abends

with U0100-00000004, the master CQS continues with the overflow threshold process. If this CQS does not abend, the master CQS terminates the overflow threshold process.

See reason codes RC=X'00000044' and RC=X'00000020' for more information.

X'00000044' The CQS overflow threshold process in another CQS could not obtain the structure quiesce latch. This is a propagated error. The CQS overflow threshold process for this CQS ends. The master CQS will not issue message CQS0263E with RC=X'00000044'; the master CQS ends the overflow threshold process and issues message CQS0263E with RC=X'00000020'.

See reason codes RC=X'00000040' and RC=X'00000020' for more information.

X'00000100' The CQS overflow threshold process was unable to allocate a buffer (through BPEBPGET) during Phase 2. Overflow threshold processing ends.

X'00000104' The CQS overflow threshold process was unable to write the Overflow Threshold End log record. Overflow threshold processing has already completed.

X'00000108' The CQS overflow threshold process encountered an error when it attempted to access the structure during Phase 2. This may have been a failure that required a rebuild, but the rebuild was either not initiated or it failed. Overflow threshold processing ends.

X'0000010C' The CQS overflow threshold process encountered an error while attempting to obtain a resource latch during Phase 2. Overflow threshold processing ends.

X'00000110' The CQS overflow threshold process received a nonzero return code from BPE AWE services during Phase 2. Overflow threshold processing ends.

X'00000114' The CQS overflow threshold process attempted to translate a queue type into a list header number during Phase 2. The CQS service CQSLHS indicated the queue type was invalid. Overflow threshold processing ends.

X'00000118' No queues were moved to the overflow structure during phase 2 of threshold processing. Threshold processing will not occur again until one of the following occurs:

- CQS is no longer in overflow mode, if CQS was already in overflow mode before the current threshold process started.
- The overflow structure is rebuilt.

X'0000011C' This CQS lost connectivity to the structure between overflow threshold IXLUSYNC 2 and 3. The *cqsid* in the message is the identifier of the overflow master CQS. Structure overflow threshold processing unsuccessfully ends for this CQS. If this CQS was the overflow master, another CQS that has connectivity to the structure, if any, will take over the overflow process. If this CQS was not the overflow master, overflow threshold continues for all CQSs that still have connectivity to the structure.

System Action: CQS processing continues. If the system is still over the overflow threshold the next time CQS writes data to the structure, overflow threshold processing is initiated again (except when the reason code is X'00000024').

System Programmer Response: If you are unable to resolve the problem, copy the SYSLOG and dump of the master CQS address space, and call the IBM Support Center for help.

Module: CQSSTE10, CQSOFL00, CQSOFL50

CQS0264I CQS *cqsname* TERMINATED OVERFLOW THRESHOLD PROCESSING, ALTER SUCCESSFUL FOR STRUCTURE *structurename*

Explanation: The CQS Overflow threshold process issued an IXLALTER request to increase the size of the structure. The alter increased the size enough so that the structure is below the overflow threshold. Threshold processing is terminated.

In the message text:

cqsname
The name of the CQS that was master of overflow threshold processing.

structurename
The name of the structure for which CQS started overflow threshold processing.

System Action: CQS processing continues.

Module: CQSSTE10, CQSOFL00

CQS0265I STRUCTURE ALTER REQUEST STARTED *structurename*

Explanation: A structure alter request started because one of the following occurred:

- The operator entered a `SETXCF START,ALTER` command
- CQS reached the overflow threshold level
- CQS detected that a resource structure was full

In the message text:

structurename
The name of the structure for which the alter request was started.

System Action: CQS processing continues.

Module: CQSSTE00

CQS0266I STRUCTURE ALTER REQUEST COMPLETED FOR STRUCTURE *structurename*

Explanation: A structure alter request successfully completed. This request was initiated because an operator entered a `SETXCF START,ALTER` command or because CQS reached the overflow threshold level. In the message text:

structurename
The name of the structure for which the alter request successfully completed.

System Action: CQS processing continues.

Module: CQSSTE00

CQS0267W STRUCTURE ALTER REQUEST FAILED FOR STRUCTURE *structurename* **RC=***xxxxxxxx*

Explanation: A structure alter request failed. The structure ALTER may have been initiated by:

- The operator when a `SETXCF START,ALTER` command is entered to alter the size of the structure.
- The CQS Overflow Threshold process to increase the size of the structure when the overflow threshold is reached.
- The CQS Inform process to increase the size of the structure when there is no more room for EMCs (Event Monitoring Controls). The inform process occurs for a CQSINFRM request, a structure rebuild, or after re-connecting to a structure. In the message text:

structurename
The name of the structure for which the alter request failed.

xxxxxxxx
The return code.

The return code can be one of the following:

Return Code	Explanation
X'00000004'	The CQS was unable to alter the coupling facility structure to the target size. The structure size may or may not have changed. This return code is possible when the structure alter attempts to increase the structure size or EMC percentage, but there is not enough room in the coupling facility for the altered structure. This return code is also possible when an operator-initiated structure alter attempts to decrease the structure size, but the structure's data objects won't fit in the smaller structure.
X'00000008'	The CQS was unable to alter the coupling facility structure to the target size. A rebuild was initiated during the alter process. The coupling facility structure size was not changed.
X'0000000C'	The CQS was unable to alter the coupling facility structure to the target size. The structure failed during the alter process. The coupling facility structure size was not changed.
X'00000010'	The CQS was unable to alter the coupling facility structure to the target size. Structure connectivity was lost during the alter process The coupling facility structure size was not changed.
X'00000018'	The CQS was unable to alter the coupling facility structure to the target size. Ratios specified on the alter request are not consistent with the structure. The coupling facility structure size was not changed.
X'0000001C'	The CQS was unable to alter the coupling facility structure to the target size. An unknown error occurred. The coupling facility structure size was not changed.
X'00000020'	The CQS was unable to alter the coupling facility structure to the target size. The structure alter was stopped by the operator. The coupling facility structure size was not changed.
X'00000024'	The CQS was able to alter the coupling facility structure to the target size but there was no space allocated for the EMC. The target EMC count was zero. CQS initiated another IXLALTER to restore the coupling facility structure to its previous size.

System Action: CQS processing continues.

System Programmer Response: If you are unable to resolve the problem, copy the SYSLOG, take a dump of the master CQS address space, and call the IBM Support Center for help.

Module: CQSSTE00

CQS0268W OVERFLOW STRUCTURE *structurename* **IS LESS THAN** *percentage* **OF THE PRIMARY STRUCTURE SIZE**

Explanation: When CQS connected to the overflow structure it determined that the size of the overflow structure was less than the stated percentage of the primary structure size.

In the message text:

structurename
The name of the overflow structure.

percentage
The percentage of the primary structure size that is used to determine the minimum overflow structure size.

System Action: CQS connects to the overflow structure during CQS initialization. If CQS detects that the overflow structure size is less than the stated percentage of the primary structure size, CQS issues the CQS0268W message. CQS is allowed to initialize even though the overflow structure is too small. CQS disconnects from and deletes the overflow structure at the end of CQS initialization.

CQS does not attempt to connect to the overflow structure again until the overflow threshold is reached. If the CFRM policy definition for the overflow structure remains unchanged, CQS again issues the CQS0268W message. CQS goes into overflow mode, but the overflow structure is not used. Requests to add data objects to those queues that were selected for overflow are rejected.

System Programmer Response: If you intend to use the overflow structure during overflow processing, increase the size of the overflow structure. Optimally, the size of the overflow structure should be defined in the CFRM policy to be at least *X* percent of the primary structure size, where *X* is the percentage of the primary structure that must be in use before CQS goes into overflow mode (the overflow threshold). For example, if the overflow threshold was defined with the OVFLWMAX= parameter to be 75% of the primary structure size, the size of the overflow structure should be at least 75% of the primary structure size.

CQS does not attempt to connect to the overflow structure while in overflow mode. If a primary structure goes into overflow mode without an overflow structure, CQS must exit overflow mode before another attempt is made to connect to the overflow structure. CQS connects to the overflow structure during overflow threshold processing.

Module: CQSSTS10

CQS0269E CQS *cqsname* **FAILED OVERFLOW SCAN** *phase* **PROCESSING FOR STRUCTURE** *structurename* **RC=***xxxxxxxx*

Explanation: The overflow scan processing failed for the structure. In the message text:

cqsname — Name of the CQS that was the master of the overflow scan processing.

phase — The phase of the overflow scan processing that failed, either START or END.

structurename — The name of the structure for which CQS attempted overflow scan processing.

xxxxxxxx — The reason code.

Reason Code	Description
X'00000040'	The CQS overflow scan process in this CQS could not obtain the structure quiesce latch. The overflow scan process for this CQS ends.
X'00000044'	The CQS overflow scan process in another CQS could not obtain the structure quiesce latch. This is a propagated error. The CQS overflow scan process for this CQS ends.

System Action: CQS processing continues. If CQS is still in overflow mode, then the overflow scan process will start again after 15 minutes.

System Programmer Response: If you are unable to resolve the problem, copy the syslog and dump of the master CQS address space, and call the IBM Support Center for help.

Module: CQSSTE10

CQS0280I CONNECT REJECTED FOR CLIENT=*client* **USERID=***userid*

CQS0280I INSUFFICIENT AUTHORITY TO STRUCTURE *structure*

CQS0280I RACROUTE AUTH R15=*r15* **RC=***rc* **RSN=***rsn*

Explanation: A client attempted to connect to a CQS structure using a CQSCONN request, but the client was not authorized to access the structure. CQS issues a `RACROUTE REQUEST=AUTH` call to determine if the connecting client has the appropriate authority to access the requested structure. CQS uses the client's job userid to perform the authorization. The userid must have at least UPDATE authority to the structure name.

Refer to *External Security Interface (RACROUTE) Macro Reference* for an explanation of the R15, return, and reason codes. In the message text:

client The client ID that is attempting to connect.

userid The userid associated with the client's address space. If this field contains ″*NONE*″, the client is running with no userid specified.

structure
The CQS structure name to which the client is trying to connect.

r15 The value in register 15 from the RACROUTE call.

rc The RACF return code from the RACROUTE call.

rsn The RACF reason code from the RACROUTE call.

System Action: The connection request is rejected and the client is not allowed to access the requested CQS structure.

System Programmer Response: If the indicated user should be allowed to access the requested CQS structure, authorize the user to the structure resource with at least RACF UPDATE authority. If the indicated user should not be allowed to access the requested CQS structure, you might want to determine why the user is trying to connect to it, and take appropriate action to protect against unauthorized or malicious access.

Module: CQSCON00

CQS0281I CQS0281I REGISTRATION REJECTED FOR CLIENT=*client* **USERID=***userid*

CQS0281I INSUFFICIENT AUTHORITY TO CQS *cqsid*

CQS0281I RACROUTE AUTH R15=*r15* **RC=***rc* **RSN=***rsn*

Explanation: A client attempted to register with a CQS using a CQSREG request, but the client was not authorized to register with the CQSID. CQS issues a `RACROUTE REQUEST=AUTH` call to determine if the registering client has the appropriate authority to register with the requested CQSID. The client's job userid is used by CQS to perform the authorization. The userid must have at least UPDATE authority to the CQSID. Refer to *z/OS Security Server RACROUTE Macro Reference* for an explanation of the R15 return and reason codes.

In the message text:

client The client ID that attempted to register.

userid The userid associated with the client's address space. If this field contains ″*NONE*″, the client is running with no userid specified.

cqsid The CQSID of the CQS to which the client is trying to register.

r15 The value in register 15 from the RACROUTE call.

rc The RACF return code from the RACROUTE call.

rsn The RACF reason code from the RACROUTE call.

System Action: The registration request is rejected and the client is not allowed to access the requested CQS.

System Programmer Response: If the indicated user should be allowed to access the requested CQS, authorize the user to the structure resource with at least RACF UPDATE authority. If the indicated user should not be allowed to access the requested CQS structure, determine why the user is trying to connect to it, and take appropriate action to protect against unauthorized or malicious access.

Module: CQSREG20

CQS0300I *command* **COMMAND REJECTED, RC=***rc*

Explanation: CQS could not process the command. The command is rejected. In the message text:

command
The command that was rejected.

rc A return code that indicates why the command was rejected. The following return codes are defined:

01000004
An `MVS STOP` command for a CQS address space was rejected because there were clients still connected to the CQS. An `MVS STOP` command for a CQS address space will be processed only when there are no clients connected.

System Action: The command is not processed.

Module: CQSCMD00

CQS0350W *reason* **LOG STREAM** *logstreamname* **STRUCTURE** *structurename cqsid*

Explanation: CQS requested a function from the System Logger. The System Logger returned a nonzero return and reason to CQS.

In the message text:

reason *reason* is one of the following:

CQS LOG CONNECT DS DIRECTORY FULL
CQS received return code X'00000004' and reason code X'00000408' from a System Logger connect request (IXGCONN).

CQS LOG CONNECT POSSIBLE LOSS OF DATA
CQS received return code X'00000004' and reason code X'00000407' from a System Logger connect request (IXGCONN).

CQS LOG CONNECT PREVIOUS OFFLOAD ERROR
CQS received return code X'00000004' and reason code X'00000409' from a System Logger connect request (IXGCONN).

CQS LOG WRITE LOSS OF DATA
CQS received return code X'00000004' and reason code X'00000405' from a System Logger write request (IXGWRITE).

CQS LOG WRITE POSSIBLE LOSS OF DATA
CQS received return code X'00000004' and reason code X'00000407' from a System Logger write request (IXGWRITE).

SYSTEM LOGGER UNAVAILABLE
CQS received return code X'00000008' and reason code X'00000890' from a System Logger connect, write, browse or delete request (IXGCONN, IXGWRITE, IXGBRWSE, IXGDELET).

logstreamname The name of the log stream to which CQS is connected for the structure. The name is defined in the CQSSGxxx PROCLIB member.

structurename The name of the coupling facility message queue structure.

cqsid The CQS identifier.

System Action: The system action is determined by the function and result:

CQS LOG CONNECT DS DIRECTORY FULL
or

CQS LOG CONNECT PREVIOUS OFFLOAD ERROR
When this error occurs, CQS initiates a structure checkpoint, and processing continues. If CQS is initializing, the structure checkpoint is delayed until CQS restarts.

CQS LOG CONNECT POSSIBLE LOSS OF DATA
When this warning is received during CQS initialization, CQS issues abend U0014, subcode X'000000A0' from module CQSIST10. Any other time this error occurs, CQS initiates a structure checkpoint, and processing continues.

CQS LOG WRITE LOSS OF DATA
or

CQS LOG WRITE POSSIBLE LOSS OF DATA
CQS initiates a structure checkpoint and processing continues.

SYSTEM LOGGER UNAVAILABLE
When this warning occurs, CQS waits for the system logger address space to become available. CQS is not able to process any work for this structure, which requires access to the CQS log stream.

System Programmer Response: The programmer response is determined by the function and result.

CQS LOG CONNECT POSSIBLE LOSS OF DATA
Delete and redefine the log stream, restart CQS, then take a structure checkpoint.

SYSTEM LOGGER UNAVAILABLE
The System Logger address space is not currently available for use by CQS. Before any CQS processing can continue, you must start the System Logger address space so CQS can connect to the CQS log stream.

For all other reasons, ensure the structure checkpoint completes successfully.

CQS0352E LOG WRITE ERROR *reason*

CQS0352E LOG *logstreamname* **STRUC** *structurename cqsid*

Explanation: An error was encountered while attempting to write a log record to the CQS log. In the message text:

reason

- DUE TO BUFFER SIZE, LEN=*blocklen* MAX=*maxbufsize*

  The length of the log record that CQS attempted to write is longer than the maximum buffer size that can be written to the log. CQS is unable to write the required log record. The process that attempted to write the log records ends unsuccessfully.

All CQS address spaces that are connected to the log stream must be shut down in order to disconnect from the log stream.

blocklen
The length of the buffer that CQS attempted to write to the CQS log stream. This value is specified by CQS on the MVS IXGWRITE macro for the BLOCKLEN= parameter, and is the length of the CQS log record.

maxbufsize
The maximum length of a buffer that can be written to the CQS log stream. This value is specified by the user in the LOGR policy for the MAXBUFSIZE parameter.

logstreamname
The name of the log stream to which CQS is connected for the structure. The name is defined in the CQSSGxxx PROCLIB member.

structurename
The name of the coupling facility message queue structure.

cqsid The CQS identifier.

System Action: CQS processing continues.

Programmer Response: Change the MAXBUFSIZE parameter in the LOGR policy to be large enough to contain the largest log record written by CQS. Refer to *IMS Version 9: Common Queue Server Guide and Reference* for a recommendation of the proper way to specify MAXBUFSIZE.

Delete the log structure and the old LOGR policy, then activate the new LOGR policy. If CQS shut down normally from the previous execution, CQS can be warm started. If CQS did not shut down normally, there is no log to read for restart processing; CQS must be cold started.

Warning: The message queues will not be recoverable if the structure is lost or the CF that contains the queues fails while the MAXBUFSIZE is being changed. After changing MAXBUFSIZE and restarting all the CQS address spaces, initiate a structure checkpoint for each structure to ensure the structures can be recovered in case of a structure or CF failure is encountered.

Module: CQSLOG20

CQS0353I **CQS0353I** *variable text*

CQS0353I **LOG** *logstreamname* **STRUC** *structurenamecqsid*

Explanation: When the message indicates LOG READ, CQS is reading the log stream. The message indicates whether the log read is starting, in progress, or complete. When the log stream is being read, the in-progress message is issued at intervals of not less than one minute. In the text:

variable text
CQS LOG READ STARTED FROM BEGINNING OF LOG

CQS LOG READ STARTED FROM LOGTOKEN *logtoken*

CQS LOG READ STARTED FROM TIMESTAMP *timestamp*

CQS LOG READ IN PROGRESS, LOG RECORD COUNT *logrecordcount*

CQS LOG READ COMPLETED, LOG RECORD COUNT *logrecordcount*

logtoken
The log token from which CQS started reading the log stream.

timestamp
The log record timestamp from which CQS started reading the log stream.

logrecordcount
The current number of log records that have been read from the log stream.

logstreamname
The name of the log stream to which CQS is connected for the structure. The name is defined in the CQSSGxxx PROCLIB member.

structurename
The name of the coupling facility message queue structure.

cqsid The CQS identifier.

System Action: CQS processing continues.

Module: CQSLOG30, CQSLOG50

CQS0354E *variable text*

CQS0354E **LOG** *logstreamname* **STRUC** *structurenamecqsid*

Explanation: When the message indicates LOG READ, CQS log stream read processing failed. In the message text:

variable text
CQS LOG READ FAILED, LOG RECORD COUNT *logrecordcount*

logrecordcount
The current number of log records that have been read from the log stream.

logstreamname
The name of the log stream to which CQS is connected for the structure. The name is defined in the CQSSGxxx PROCLIB member.

structurename
The name of the coupling facility message queue structure.

cqsid The CQS identifier.

System Action: If this error occurs during initialization, CQS terminates abnormally. If this error occurs during the structure rebuild process, CQS aborts the rebuild. Otherwise, CQS processing continues.

System Programmer Response: If you cannot resolve the problem, copy the SYSLOG and the dump of the CQS address space and call the IBM Support Center for help.

Module: CQSLOG50

CQS0360W QUEUE REGISTRATION FAILED FOR STRUCTURE *structurename*; CHANGE CFRM POLICY AND REBUILD

Explanation: Queue registration failed for one or more queues because all the Event Monitoring Controls (EMC) are in use. CQS attempted to alter the structure to increase the EMC percentage, but the increase could not be made. All future queue registrations will fail until the structure is altered or rebuilt and more EMCs are made available. After any successful queue registrations have been performed, the CQS0360W message appears each time a queue registration fails. Queue registration occurs when:

- There is a CQSINFRM request
- At the end of structure rebuild
- After CQS reconnects to a structure
- After CQS moves queues to the overflow structure.

System Action: CQS processing continues.

System Programmer Response: Change the CFRM policy to increase the structure size. Activate the new CFRM policy and initiate a structure rebuild using the z/OS operator command SETXCF START,REBUILD.

Module: CQSINF00

Chapter 9. CSL Messages

This section explains the messages that are issued by the Common Service Layer (CSL), that include:

- Operations Manager (OM)
- Resource Manager (RM)
- TSO Single Point of Control (SPOC)
- Structured Call Interface (SCI)

For more information on CSL, see *IMS Version 9: Common Service Layer Guide and Reference*.

In this section:

- "CSLM Messages" on page 280
- "CSLN Messages" on page 285
- "CSL Return and Reason Codes" on page 293
- "REXX SPOC API Return and Reason Codes" on page 293

CSL0001E CSL INITIALIZATION ERROR IN *modulename servicename* **RC=***rc detail*

Explanation: See the last form of this message for the message description.

CSL0001E CSL INITIALIZATION ERROR IN *modulename* **PARM VALIDATION ERROR** *parmname*

Explanation: See the last form of this message for the message description.

CSL0001E CSL INITIALIZATION ERROR IN *modulename* **UNKNOWN TCB TYPE** *tcbtype*

Explanation: See the last form of this message for the message description.

CSL0001E CSL INITIALIZATION ERROR IN *modulename servicename* **RC=***rc* **RSN=***rsn*

Explanation: An error occurred during a CSL address space's initialization in the identified module. The initialization error could occur while processing a service, validating a parameter in a PROCLIB member, or initializing a TCB.

In the message text:

detail Provides additional information about the error.

modulename
The name of the module that issued the error.

parmname
The name of the PROCLIB member parameter that is in error. The variable can be one of the following values:

ARMRST
The ARMRST parameter is invalid. Valid values are `Y` or `N`. This parameter is specified as a CSL address space run time parameter, or specified in the CSL address space initialization PROCLIB member (CSLOI*xxx*, CSLRI*xxx*, or CSLSI*xxx*).

CMDSEC
The OM run time parameter CMDSEC is invalid. Valid values are `A`, `E`, `N`, or `R`.

CQSSSN
The CQSSSN parameter is invalid. If this parameter is specified, it must contain something other than all blanks. Imbedded blanks are ignored. The CSLRI*xxx* PROCLIB member defines the CQSSSN parameter.

CQSSSN=MISSING
The IMSplex is defined with a resource structure (STRNAME), but the CQS subsystem name definition (CQSSSN) is missing. A CQS subsystem name is required with a resource structure.

IMSPLEX COUNT>MAX
The OM CSLOI*xxx*, SCI CSLSI*xxx*, or RM CSLRI*xxx* PROCLIB member defines an invalid number of IMSplexes. The IMSplex count is more than the maximum number supported. For IMS Version 9, the maximum number of IMSplexes supported is one.

NAME The NAME parameter, which defines the IMSplex name, is invalid. If this parameter is specified, it must contain

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something other than all blanks. Imbedded blanks are ignored. The NAME parameter is specified in the CSLOI*xxx*, CSLRI*xxx*, or CSLSI*xxx* PROCLIB member.

NO SECURITY EXIT
The security exit is requested with the CMDSEC=A or CMDSEC=E option, but the SECURITY exit is not defined to BPE in the user exit PROCLIB member.

OMNAME
The OMNAME parameter is not specified for OM. This parameter must be specified as an OM run time parameter or specified in the CSLOI*xxx* PROCLIB member.

RMNAME
The RMNAME parameter is not specified for RM. This parameter must be specified as an RM run time parameter or specified in the CSLRI*xxx* PROCLIB member.

RSRCSTRUC
The CSLRI*xxx* PROCLIB member defines a CQS subsystem (CQSSSN), but there is no IMSplex defined in the CSLRI*xxx* PROCLIB member with a resource structure (RSRCSTRUC). A resource structure is required with a CQS subsystem name.

SCINAME
The SCINAME parameter is not specified for SCI. The SCINAME parameter must be specified as an SCI run time parameter or specified in the CSLSI*xxx* PROCLIB member.

STRNAME
The STRNAME parameter is invalid. If this parameter is specified, it must contain something other than all blanks. Imbedded blanks are ignored. The CSLRI*xxx* PROCLIB member defines the STRNAME parameter.

rc The return code for the failing service.

For information on the BPE service return codes, see "BPE Service Return Codes" on page 3. For information on the CQS return and reason codes, see "CQS Service Return Codes" on page 25.

rsn The reason code from the failing service.

servicename
The name of the service that detected the error. The service can be provided by:

BPEservicename
For information on BPE service names, see "BPE Service Return Codes" on page 3.

If BPELOAD displays as the failing service name, the CSL address space was attempting to load a module. The text that appears in the message is the name of the module that could not be loaded. Ensure that the module is linked into the IMS.SDFSRESL.

CSLZARM0
For information on ARM service names, see *z/OS MVS Programming: Sysplex Services Reference*.

CSLZLIC0
For information about the IBM License Manager, see *z/OS: Planning for Workload License Charges.*

CQSservicename
For information on CQS service names, see "CQS Service Return Codes" on page 25.

MVSservicename
Service can also be provided by z/OS. For information on z/OS services, see *z/OS MVS Programming: Authorized Assembler Services Reference, Volumes 1-4*.

tcbtype The TCB type that encountered an error.

System Action: The CSL address space terminates abnormally with the CSL abend 0010.

System Programmer Response: If you are unable to resolve the problem, save the SYSLOG and the dump, and call the IBM Support Center for assistance.

Module: CSLOIN00, CSLOIN10, CSLOIT00, CSLRIN10, CSLRIT00, CSLSII00,CSLSING0, CSLSIN00, CSLSIS00, CSLSIT00, CSLSIT10, CSLSIX00, CSLSPL10, CSLSFRC0.

CSL0002E IMSPLEX INITIALIZATION ERROR IN *modname servicenm* **RC=***rc detail*

Explanation: See the last form of this message for the message description.

CSL0002E IMSPLEX INITIALIZATION ERROR IN *modname* **PARM VALIDATION ERROR** *detail*

Explanation: See the last form of this message for the message description.

CSL0002E IMSPLEX INITIALIZATION ERROR IN *modname servicenm* **RC=***rc* **RSN=***rsn* **CC=***compcode*

Explanation: See the last form of this message for the message description.

CSL0002E IMSPLEX INITIALIZATION ERROR IN *modulename servicenm* **RC=***rc* **RSN=***rsn*

Explanation: IMSplex initialization encountered an error.

In the message text:

compcode
The service completion code.

detail Extra detail about the error that is unique to the specific error. This variable can be one of the following:

MULTIPLE RMS
This RM cannot join the IMSplex because it would result in an IMSplex with multiple RMs where at least one of the RMs is not defined with the resource structure. Only one RM is allowed in an IMSplex with no resource structure identified.

RMGLOBAL IMSPLEX
The IMSplex name defined by this RM does not match the IMSplex name defined by other RMs in the IMSplex. The IMSplex name is defined in the global resource for RM.

STRUCTURE TYPE
RM connected to a structure whose type is not supported by RM. RM can only connect to resource structures. The structure defined with the CSLRI*xxx* STRNAME parameter is not a resource structure.

modulename
The name of the module that issued the error. The first four characters of the module name indicate which CSL address space encountered an error:

- CSLO indicates OM.
- CSLR indicates RM.
- CSLS indicates SCI.

rc The OM, RM, or SCI service return code. For information on these return codes, see the *IMS Version 9: Common Service Layer Guide and Reference*.

rsn The service reason code

servicename
The name of the service that detected the error. The service provider can be: BPE, OM, RM, or SCI. For information on BPE service return codes, see “BPE Service Return Codes” on page 3. For information on OM, RM, or SCI service return codes, see *IMS Version 9: Common Queue Server Guide and Reference*.

System Action: The CSL address space terminates abnormally with the CSL abend 0010.

System Programmer Response: If you are unable to resolve the problem, save the SYSLOG and the dump, then call the IBM Support Center for assistance.

Module: CSLOPL10, CSLRPL10, CSLRPL20, CSLRPL30, CSLSINP0, CSLSINX0, CSLSRGSO, CSLSXCG0

CSL0003A *csltype* **IS WAITING FOR** *target*

Explanation: The CSL address space is waiting for the target address space to become active. The CSL address space tries accessing the target address space several times. If the target address space remains inactive, the CSL address space abends with CSL abend 0010. You might need to start the target address space if it is not already started.

In the message text:

csltype The CSL type, which can be OM or RM.

target The target address space, which can be SCI or CQS.

System Action: The CSL address space continues attempting to communicate with the *target* address space. If the *target* address space remains inactive, the CSL address space abends with CSL abend 0010.

System Operator Response: Bring up the target address space. If the target is CQS, start the CQS identified in the CSLRIxxx PROCLIB member by CQSSSN=.

Module: CSLOPL10, CSLRIN10, CSLRPL10

CSL0020I *csl* **READY**

Explanation: The CSL address space is available and ready. In the message text, *csl* is the type of CSL and can be OM, RM, or SCI.

System Action: Processing continues.

System Operator Response: None.

Module: CSLOIN10, CSLRIN10, CSLSIS00

CSL0021I *csl* **SHUTDOWN COMPLETE**

Explanation: The CSL address space indicated by *csl* has completed shutdown. In the message text, *csl* can be OM, RM, or SCI.

System Action: Processing continues.

System Operator Response: None.

Module: CSLOTM20, CSLRTM20, CSLSTM20

CSL0300I *csl* **SHUTDOWN REQUESTED, CLIENT COUNT=***cnt* **IMSPLEX=***plex*

Explanation: Shutdown was requested for the CSL address space indicated by *csl* in the IMSplex indicated by *plex*. There are clients connected to the *csl* address space.

In the message text:

csl The address space for which shutdown was requested. This variable can be OM, RM, or SCI.

cnt The number of clients connected to the *csl* address space.

plex The name of the IMSplex in which *csl* resides.

System Action: For RM, the clients are internally deregistered and shutdown proceeds.

For OM, the clients are internally deregistered and shutdown proceeds when all outstanding commands have completed or timed out.

For SCI, shutdown proceeds when all outstanding request have either completed or timed out.

Programmer Response: None

Module: CSLOTM10, CSLRTM10, CSLSTM10

CSL2020I **STRUCTURE** *strname* **REPOPULATION SUCCEEDED**

Explanation: RM was notified by CQS that the structure needs to be repopulated after a resource structure failure. RM successfully repopulated its resources on the resource structure.

In the message text, *strname* is the resource structure name.

System Action: Processing continues

Programmer Response: None.

Module: CSLRPOP0

CSL2021E **STRUCTURE** *strname* **REPOPULATED ERROR,** *details*

Explanation: RM was notified by CQS that the resource structure needed to be repopulated after a resource structure failure. RM attempted to repopulate its resources, but failed.

In the message text:

strname
The resource structure name.

details Indicates the details of the error. Details on the information can be found in one of the following locations:

- *servicename* RC=*retcode* RSN=*rsncode* CC=*compcode*

  servicename The name of the service that encountered an error.

  retcode The service return code.

  rsncode The service reason code.

  compcode The service completion code.

- *resourcename resourcevalue errortext*

  resourcename The name of the resource that encountered an error. A resource name of CSLRRTYP indicates the resource type table. A resource name of CSLRGBL indicates the RM global information resource.

  resourcevalue The attribute value of a resource that is in error. A resource value of IMSPLEXNAME indicates that the IMSplex name did not match the IMSplex name in the CSLRRTYP resource on the resource structure.

  errortext Additional text about the error. Error text that is MISMATCH, indicates that the resource value did not match the resource value on the resource structure.

- *resourcename errortext*

  resourcename The name of the resource that encountered an error. A resource name of CSLRRTYP indicates the resource type table. A resource name of CSLRGBL indicates the RM global information resource.

  errortext Additional information about the error. Error text that is CQS UNAVAILABLE means that the repopulation failed because CQS is unavailable. Error text that is STRUCTURE UNAVAILABLE means that the repopulation failed because the structure is unavailable.

System Action: RM quiesces activity for the IMSplex so that it no longer processes RM requests.

System Programmer Response: Shutdown RM, since it can no longer process RM requests. You may try restarting RM after shutting it down.

Module: CSLRPOP0

CSL2030I RM *rmid* IS QUIESCED; CQS *cqsid* IS UNAVAILABLE

Explanation: RM *rmid* is quiesced and unavailable to process RM requests, because CQS *cqsid* is no longer available. RM cannot process RM requests without CQS. RM *rmid* is associated with CQS *cqsid*. If CQS becomes unavailable and RM is already quiesced for another reason, this message is not issued.

System Action: RM notifies SCI it is quiesced so that SCI stops routing RM requests to this RM.

System Programmer Response: Bring CQS *cqsid* up, to make RM *rmid* available. Ensure there is at least one RM in the IMSplex that is available to process RM requests.

If you are unable to resolve the problem, copy the SYSLOG, dump the CQS and RM address spaces, and call the IBM Support Center for help.

Module: CSLRCQE0

CSL2031I RM *rmid* IS AVAILABLE; CQS *cqsid* IS AVAILABLE

Explanation: RM *rmid* is once again available to process RM requests because CQS *cqsid* became available. RM *rmid* is associated with CQS *cqsid*.

System Action: RM registers to CQS and connects to the resource structure. RM notifies SCI it is ready to process requests. SCI resumes routing requests to this RM.

System Programmer Response: None.

Module: CSLRCQE0

CSL2040I RM *rmid* IS QUIESCED; STRUCTURE *strname* IS UNAVAILABLE

Explanation: RM *rmid* is quiesced and unavailable to process RM requests because resource structure *strname* is no longer available. RM cannot process RM requests without the resource structure. RM *rmid* is associated with CQS *cqsid*. If the structure becomes unavailable and RM is already quiesced for another reason, this message is not issued.

System Action: RM notifies SCI it is quiesced so that SCI stops routing RM requests to this RM.

System Programmer Response: Analyze why the structure is unavailable and correct the problem.

If the structure failed, a new structure could not be allocated. Analyze coupling facility usage and the CFRM policy to determine why the new structure could not be allocated.

If the link failed, restore the link or initiate a structure copy to copy the resource structure to a coupling facility to which all CQSs have access. Ensure there is at least one RM in the IMSplex that is available to process RM requests.

If you are unable to resolve the problem, copy the SYSLOG, dump the CQS and RM address spaces, and call the IBM Support Center for help.

Module: CSLRSTE0

CSL2041I RM *rmid* IS AVAILABLE; STRUCTURE *strname* IS AVAILABLE

Explanation: RM *rmid* is again available to process RM requests because resource structure *strname* has become available. RM *rmid* is associated with CQS *cqsid*.

System Action: RM notifies SCI it is ready to process requests. SCI resumes routing requests to this RM.

Programmer Response: None.

Module: CSLRSTE0

CSL2050E SERVICE *servicename* ERROR MODULE RC=*rc* RSN=*rsn*

Explanation: See the last form of this message for an explanation.

CSL2050E SERVICE *servicename* ERROR MODULE *modulename* RC=*rc* RSN=*rsn* CC=*compcode*

Explanation: RM normal processing invoked a service that failed. In the message text:

servicename
: The name of the service that failed. The service can be a CQS request, such as CQSREG, or CQSCONN.

modulename
: The module that invoked the service.

rc
: The service return code.

rsn
: The service reason code.

compcode
: The service completion code.

For information on the reason, return, and completion codes, see “CQS Service Return Codes” on page 25.

System Action: If CQS became available and the RM CQSREG or CQSCONN request failed, RM remains quiesced.

System Programmer Response: Look up the service name, return code, reason code, and completion code to determine if you can correct the problem.

If you cannot resolve the problem, copy the SYSLOG, dump the CQS and RM address spaces, and call the IBM Support Center for help.

Module: CSLRCQE0

CSL2200I CLIENT *client* **INITIATED PROCESS** *imsplexprocess* **FOR IMSPLEX** *imsplexname*

Explanation: An IMSplex-wide process was initiated by a client, or initiated again after an RM or resource structure failure. If an RM or resource structure failure occurs during the process and the client forces a process step to recover from the failure, this message might appear more than once.

In the message text:

client The name of the client that initiated the process.

imsplexprocess The name of the process that was initiated.

imsplexname The name of the IMSplex for which the process was initiated.

System Action: Processing continues.

Programmer Response: None

Module: CSLRPR00, CSLRPR10

CSL2201I CLIENT *client* **TERMINATED PROCESS** *imsplexprocess* **FOR IMSPLEX** *imsplexname*

Explanation: A client successfully terminated an IMSplex-wide process.

In the message text:

client The name of the client that terminated the process.

imsplexprocess The name of the process that terminated.

imsplexname The name of the IMSplex on which the process was terminated.

System Action: Processing continues.

Programmer Response: None.

Module: CSLRPR40

CSL3000E SCI IMSPLEX INITIALIZATION ERROR IMSPLEX *plex* **ALREADY MANAGED BY SCI** *sciname*

Explanation: An SCI is already managing the IMSplex on the z/OS system. Only one SCI is allowed per IMSplex per z/OS. In the message text:

plex The name of the IMSplex.

sciname The name of the active SCI that is managing the IMSplex on the z/OS system.

System Action: The initializing SCI is abnormally terminated.

System Operator Response: In the CSLSIxxx - SCI Initialization PROCLIB Member, check the IMSplex name that is being managed by the SCI and change the IMSplex name if necessary.

Module: CSLSINP0

CSL3001E SCI IMSPLEX ERROR SCI *sciname* **ALREADY EXISTS IN IMSPLEX** *plex*

Explanation: An SCI with the same name is already active in the IMSplex. In the message text:

sciname The name of the SCI that already exists in the IMSplex.

plex The name of the IMSplex.

System Action: The initializing SCI is abnormally terminated.

System Operator Response: In the CSLSIxxx - SCI initialization Proclib Member, check to make sure there is no SCI with the same name as *sciname* in the IMSplex; if there is, change the SCI name.

Module: CSLSXCG0

CSL3002E SCI INITIALIZATION ERROR *sciname* **ALREADY ACTIVE ON OS IMAGE**

Explanation: An SCI, specified by *sciname*, is already active on the z/OS image.

System Action: The initializing SCI is abnormally terminated.

System Operator Response: In the CSLSIxxx - SCI Initialization PROCLIB member, check to ensure that there is no SCI with the same name on the z/OS Image; if there is, change the SCI name.

Module: CSLSING0, CSLSFRCO

CSL3011W UNABLE TO CLEANUP *storage_type* *storage_id* **-** *reason*

Explanation: SCI was requested to cleanup global storage and was unable to delete a control block or module. In the message text:

storage_type
Type of storage that could not be released. If the storage is the registration cell pool, the id will be `RG CPOOL`. The possible values are:

CONTROL BLOCK
The storage is an SCI global control block.

CPOOL
The storage is the registration cell pool.

MODULE
The storage is an SCI global module whose address was obtained from the SBGL.

MODULE (CURR)
The storage is an SCI global module whose address was obtained from the current SGRT.

MODULE (PREV)
The storage is an SCI global module whose address was obtained from the previous SGRT.

storage_id
The ID of the piece of storage that could not be released. If the storage is a control block, the storage ID is the control block name. If the storage is a module, the storage ID is the module name.

reason The reason the storage could not be released. The possible values are:

BAD DATA
If the storage is a control block, either the eyecatcher is bad, the length is negative, or the length is too large. If the storage is a module, the storage does not have the typical initial two bytes at the entry point address or an eyecatcher, which indicates a vector table.

ABEND
An abend occurred while trying to access or release the storage.

System Action: SCI continues processing.

System Programmer Response: The problem might have been caused by a previous problem with SCI (for example, a storage overlay). If you are unable to resolve or understand the problem, save the SYSLOG and the LOGREC data and call the IBM Support Center for assistance.

Module: CSLSFRC0

CSL3012W UNABLE TO DELETE MVS NAME TOKEN FOR *control_blk_id nt_name* **RC=***return_cd*

Explanation: SCI was unable to delete the specified MVS Name/Token. In the message text:

control_blk_id The ID of the control block that is represented by the Name/Token that was being deleted. The possible values are:

CSLSSGBL
The Name/Token represented the SCI global block.

CSLSPGBL
The Name/Token represented an IMSplex global block.

nt_name The name that was used to specify the Name/Token that was being deleted

return_cd The return code from the IEANTDL service.

System Action: SCI continues processing. Depending on the return code received from the IEANTDL service, SCI might not be able to initialize because it might be unable to add the Name/Token later in the SCI initialization.

System Programmer Response: The problem might have been caused by a previous problem with SCI (for example, a storage overlay). If you are unable to resolve or understand the problem, save the SYSLOG and the LOGREC data and call IBM Support Center for assistance.

Module: CSLSFRC0

CSL3013W MVS NAME TOKEN NOT FOUND FOR *nt_type nt_name***. UNABLE TO DELETE ASSOCIATED GLOBAL STORAGE**

Explanation: The message is issued when SCI is requested to clean up global storage with the FORCE startup parameter and SCI is not able to locate the MVS Name/Token for the indicated type and name. The global storage that may have been associated with the Name/Token is not deleted. In the message text:

nt_type The type of MVS Name/Token that SCI is not able to locate. The possible values are:

SCI The Name/Token that represents the SCI instance.

IMSPLEX
The Name/Token that represents the IMSplex.

nt_name
The name that was used to specify the Name/Token that was being deleted.

System Action: SCI continues processing. No attempt is made to delete any global storage that is associated with the Name/Token type.

System Programmer Response: The storage and Name/Token might have already been cleaned up by a

previous instance of SCI or the Name/Token was never created on the system because SCI was never started. If you are unable to resolve or understand why this message was issued, save the SYSLOG and the LOGREC data and call the IBM Support Center for assistance.

Module: CSLSFRC0

CSL3014I SHUTDOWN REQUESTED AFTER GLOBAL STORAGE CLEANUP

Explanation: This message is issued when SCI is started with the SHUTDOWN subparameter of the FORCE startup parameter. It is issued after SCI has completed its global storage cleanup and is ready to shut down.

System Action: SCI shuts down with a return code of 4.

System Programmer Response: None.

Module: CSLSIN00

CSL3051I *resource_type* **IN SHORT SUPPLY, XCF RC=***return_code* **RSN=***reason_code***,** *failure_count* **FAILURES SINCE LAST MESSAGE**

Explanation: This message is issued when SCI is unable to send data using XCF because of an XCF resource shortage. SCI waits for one second and attempts to send the data again. If the resource shortage has not been alleviated after a set number of attempts for a single piece of data, SCI will not send that data. The message will not be issued more than once per minute for any resource type.

resource_type indicates the type of resource for which XCF has a shortage. The possible values are:

BUFFER
XCF has a temporary shortage of message buffers. This can occur because there is suddenly a large amount of buffer usage. Possible causes are a large amount of SCI XCF message traffic or a large amount of message traffic from another XCF user.

RESOURCE
XCF has a temporary shortage of non-buffer resource. Examples of other XCF resources are signaling paths, message spaces and storage. Use the XCF return and reason codes listed in the message to determine what resource is in short supply.

XCF RC=*return_code* RSN=*reason_code* are the codes that were received when SCI attempted to send the data. The XCF return and reason codes are documented in the *z/OS MVS Programming: Authorized Assembler Services Reference, Volumes 1-4*.

failure_count indicates the number of failures for the indicated resource type since the last message was issued.

System Action: SCI waits for one second and attempts to send the data again. If the resource shortage has not been alleviated after a number of attempts for a single piece of data, SCI will not send that data.

System Programmer Response: If the shortage is a result of a temporary large increase of data being sent through XCF, nothing needs to be done because the situation will be resolved as the volume of data traffic is reduced. If the problem persists, adjust the XCF configuration. The XCF configuration is discussed in *z/OS MVS Setting Up a Sysplex*

Module: CSLSXCO0

CSL3101I SCI CLEANUP COMPLETE *sciname*

Explanation: The z/OS resource manager has completed its cleanup for the SCI specified by *sciname*.

System Action: Processing continues.

System Operator Response: None.

Module: CSLSRM00

CSL3102I SCI CLEANUP HAS COMPLETED FOR MEMBER *membername*

Explanation: SCI completed cleanup for the IMSplex member specified by *membername*. If *membername* is **UNKN**, SCI was not able to determine the name of the IMSplex member.

System Action: Processing continues.

System Operator Response: None.

Module: CSLSRM20

CSL3110E MEMBER *member_name* **EXIT SRB ABEND** *abend_code* **PSW=***psw* **RSN=***rsn modname=module_address* **EXIT=***exit_address status*

Explanation: SCI scheduled an SRB to the address space of the member identified by *member_name* to either drive an SCI member exit or to perform a task in the member address space. Either the SCI SRB routine or the member exit abended.

In the message text:

member_name The name of the IMSplex member in which the abend occurred.

abend_code The abend that occurred (S*xxx* for system abends, and U*xxxx* for user abends.)

psw The PSW (program status word) contents at the time of the abend.

rsn The abend reason code, if any, or N/A if there is none.

modname The name of the SRB module that was scheduled by SCI.

module_address
The address of the module indicated by *modname*.

exit_address The address of the member exit that was called. This field is not displayed if the abend occurred in CSLSSR50.

status Text that indicates where the abend occurred during SCI interface processing. *status* can be one of the following values:

BEFORE EXIT
The abend occurred before the member exit was called.

IN EXIT
The abend occurred while the member exit was in control.

AFTER EXIT
The abend occurred after the member exit returned.

System Action: When the SCI member address space SRB routines abend, SCI does not abnormally terminate either the member or the SCI address space. The SRB's recovery routine takes the following actions before returning to z/OS:

- Issues the CSL3110E message.
- Produces an SDUMP of the member and SCI address spaces.
- Attempts to clean up any SCI and member storage associated with the SRB instance.

The recovery routine records diagnostic information about the abend in the LOGREC data set.

System Programmer Response: Save a copy of the dump produced and save or print a copy of the LOGREC records pertaining to this abend. If the status field in this message is something other than IN EXIT and the member is an IBM product (for example, IMS), contact the IBM Support Center. If the status field is IN EXIT and the member is not an IBM product, contact the supplier of the member.

Module: CSLSSR00, CSLSSR10, CSLSSR20

CSL3111E SCI INTERFACE ABEND *abend_code* **PSW=***psw* **RSN=***rsn* *modname***=***module_address status*

Explanation: An abend occurred in the SCI interface during the processing of an SCI service request. In the message text:

abend_code The abend that occurred (S*xxx* for system abends and U*xxxx* for user abends.)

psw The PSW (program status word) contents at the time of the abend.

rsn The abend reason code, if any, or N/A if there is none.

modname The name of the main module that processed the SCI call that abended. The module identified by *modname* might not be the module in which the abend occurred.

module_address
The address of the module indicated by *modname*.

status Text that indicates where the abend occurred during SCI interface processing. *status* can be one of the following values:

AFT CPY BACK
The abend occurred after the member data was copied back to the requesting address space.

AFTER COPY
The abend occurred after the member data was copied to the destination address space but before the destination was notified that the data is available.

AFTER SVC
The abend occurred after the SVC was issued in either registration or deregistration.

BEFORE COPY
The abend occurred before the member data was copied to the destination address space.

BEFORE SVC
The abend occurred before the SVC was issued in either registration or deregistration.

IN COPY
The abend occurred while copying the member data to the destination address space. The abend might have occurred because of bad data passed from the source member. The abend might also occur when the

destination address space terminates while the data is being copied.

IN COPY BACK
The abend occurred while copying the results of a request back to the requesting address space. The abend might have occurred because of bad output area addresses supplied by either of the requesting or responding members.

REQUEST RTND
The abend occurred after the data was returned to the destination member.

REQUEST SENT
The abend occurred after the data was sent to the destination member.

STATUS UNKWN
The recovery routine could not determine the status of the member service request when the abend occurred.

SCI interface abends can have several causes:

- Invalid data passed by the member program.
- Errors in the interface modules.
- Environmental errors (for example, overlaid control blocks or storage problems).
- Destination member terminating while the service request is being processed.
- Problems in SCI resource cleanup for a terminated SCI or timing conditions for an SCI that is currently terminating.

SCI interface processing can abend if the destination member terminates during interface processing. For this type of abend, the interface recovery routine recovers and returns a return and reason code that indicates that the destination member is not available. No message or SDUMP are produced for this type of abend.

SCI interface processing can abend if SCI itself terminates during interface processing. For this type of abend, the interface recovery routine recovers and returns a return and reason code that indicates that SCI is not available. No message or SDUMP are produced for this type of abend.

For abends in all other situations, the interface recovery routine issues this message and produces an SDUMP of the member address space and the SCI address space, if possible. The recovery routine also logs diagnostic information to the LOGREC data sets and attempts to clean up resources associated with the service request.

If the abend occurred at a point where the recovery routine can safely retry, it retries and returns a nonzero return code to the member. If the abend occurred at a point where recovery is not possible because the status is unknown, then abend is not retried. In these cases, the member might be abended or the service request might never complete.

System Action: When an abend occurs in the SCI interface, the interface recovery routine receives control from z/OS. The recovery routine analyzes the abend, takes appropriate recovery action, and gathers diagnostic data.

System Programmer Response: Save a copy of the dump and save or print a copy of the LOGREC records pertaining to this abend. If the member is an IBM product (for example, IMS, OM, or RM), contact the IBM Support Center. If the member is not an IBM product, contact the supplier of the member.

Module: CSLSDR00, CSLSPC10, CSLSPC30, CSLSRG00, CSLSRQ00, CSLSRQ10

CSL3112E SDUMP FAILED FOR *abend* **ABEND, RC=***rc***, RSN=***rsn*

Explanation: SCI issued an SDUMP call to z/OS to produce dump of the address space after an abend, but the SDUMP was not successful.

In the message text:

abend The abend code for which the dump was taken. For system abends, the format of the code is S*xxx*, where *xxx* is the 3-digit abend code in hexadecimal. For user abends, the format of the code is U*dddd*, where *dddd* is the 4-digit abend code in decimal.

rc The return code from the MVS SDUMP macro.

rsn The reason code from the MVS SDUMP macro.

System Action: The SDUMP is skipped.

System Programmer Response: Use the return and reason code from the MVS SDUMP macro to determine the cause of the SDUMP failure. These return and reason codes are documented in the *z/OS MVS Programming: Authorized Assembler Services Reference, Volume 3*. If appropriate, correct the cause of the failure so that future dumps are not lost.

Module: CSLSSR00 (ABENDDMP subroutine)

CSL3113I DAE SUPPRESSED DUMP FOR *abend* ABEND

Explanation: SCI issued an SDUMP call to z/OS to produce a dump of the address space after an abend, but the SDUMP was suppressed by z/OS dump analysis and elimination (DAE).

The SCI recovery routines gather symptom string data related to an abend and provide this data to z/OS when an SDUMP is requested. If DAE is enabled, z/OS suppresses duplicate dumps (for example, dumps that have symptom stings identical to previously captured dumps). DAE is controlled through the MVS ADYSET*xx* PARMLIB member and the MVS SET DAE command. For details on specifying DAE options, see the *z/OS MVS Initialization and Tuning Guide*

In the message text, *abend* is the abend code for which the dump was taken. For system abends, the format of the code is S*xxx*, where *xxx* is the 3-digit abend code in hexadecimal. For user abends, the format of the code is U*dddd*, where *dddd* is the 4-digit abend code in decimal.

System Action: The SDUMP is skipped. A SCI-generated dump is suppressed if the symptom string matches a previous dump and if the current DAE setting in ADYSET*xx* is either SUPRESS or SUPPRESSALL.

Programmer Response: None.

Module: CSLSSR00 (ABENDDMP subroutine)

CSL3114I ABEND RECURSION DETECTED IN *modname* - RETRY WILL BE SKIPPED

Explanation: While processing an abend in the recovery routine, SCI detected a condition where retry is not allowed. This situation can occur if a recursive abend is detected, the recovery routine has been entered too many times, or z/OS tells SCI that retry is not allowed. SCI attempts to cleanup and then percolates.

In the message text, *modname* is the name of the routine in which the retry is being skipped.

System Action: Error recovery processing continues.

Programmer Response: None.

Module: CSLSPC10, CSLSPC30, CSLSRQ00, CSLSRQ10

CSL3115E ABEND OCCURRED IN *module* PROCESSING - UNABLE TO LOCATE SCI BLOCKS FOR DIAGNOSTICS

Explanation: An abend occurred in an SCI interface module. Normally, either message CSL3110E or CSL3111E would be issued, and a dump would be taken to document the abend. However, the SCI recovery routines could not locate the SCI control blocks required to perform this diagnostic processing. Data is still written to SYS1.LOGREC regarding the abend.

In the message text, *module* is the name of the SCI module whose recovery routine was driven.

System Action: Diagnostic data is written to SYS1.LOGREC. Abend processing continues, but no other error message is written, and no SDUMP is taken by the module that issued the CSL3115E message. You probably cannot recover from the abend, and it might result in the abnormal termination of the related SCI client.

System Programmer Response: Save or print a copy of SYS1.LOGREC and the console log. If a related dump is taken from another component (for example, due to a client abnormally terminating from the abend), save that dump as well. Contact the IBM Support Center.

Module: CSLSDR00, CSLSDR20, CSLSPC10, CSLSPC30, CSLSRG00, CSLSRG20, CSLSRQ00, CSLSRQ10, CSLSSR00, CSLSSR10, CSLSSR20, CSLSSR30, CSLSSR40, CSLSSR60, CSLSRM00, CSLSRM20

CSL3116E SRB ABEND *abend_code* MEMBER *member_name* PSW=*psw* RSN=*rsn* *module_name*=*module_address*

Explanation: An abend occurred in an SCI SRB routine that does not schedule an IMSplex member exit.

In the message text:

abend_code
: The abend that occurred (Sxxx for system abends and Uxxxx for user abends).

member_name
: The name of the member that the SRB was scheduled into, if available, or N/A if not available.

psw
: The PSW (program status word) contents at the time of the abend.

rsn
: The abend reason code, if any, or not applicable.

module_name
: The name of the module in which the abend occurred.

module_address
: The address of the module in which the abend occurred.

System Action: When the SCI member address space SRB routines abend, SCI does not abnormally terminate either the member address space or the SCI address space. The SRB's recovery routine takes the following actions before returning to z/OS:

- Issues the CSL3111E message.

- Produces an SDUMP of the member and the SCI address spaces.
- Attempts to clean up any SCI and member storage associated with the SRB instance.

The recovery routine records diagnostic information about the abend in the LOGREC data set.

System Programmer Response: Save a copy of the dump produced and save or print a copy of the LOGREC records pertaining this abend. Contact the IBM Support Center.

Module: CSLSSR70

CSL3117E **SVC ABEND** *abend_code* **MEMBER** *member_name* **PSW=***psw* **RSN=***rsn* *module_name*=*module_address status*

Explanation: An abend occurred in an SCI SVC routine.

In the message text:

abend_code
The abend that occurred (S*xxx* for system abends and U*xxxx* for user abends).

member_name
The name of the member from which the SVC was issued.

psw The PSW (program status word) contents at the time of the abend.

rsn The abend reason code, if any, or N/A.

module_name
The name of the module in which the abend occurred.

module_address
The address of the module in which the abend occurred.

status Text that indicates where the abend occurred in the SCI SVC processing. Status can be one of the following:

CLEANUP
The abend occurred while the registration SVC routine was cleaning up after an error was encountered.

COPY BACK
The abend occurred while the registration SVC routine was copying back the registration output data.

DECR ACT CNT
The abend occurred while decrementing the active member count in the MGBL block.

DELET RESMGR
The abend occurred while deleting the z/OS resource manager monitoring this member for SCI.

DEQ The abend occurred while releasing the ENQ with a DEQ.

IXCLEAVE
The abend occurred while leaving the XCF group.

PURGEDQ
The abend occurred while issuing the MVS PURGEDQ.

REG PROC
The abend occurred while the registration SVC routine was processing the registration.

RLSE MRT
The abend occurred while releasing the storage that contains the MRT.

SCHED SR40
The abend occurred while scheduling CSLSSR40 in the SCI address space.

SYSVNT OKSWP
The abend occurred while issuing the SYSEVENT OKSWAP.

TERM SBM
The abend occurred while terminating the SCI buffer manager for the member address space.

SCI registration and deregistration abends can have several causes:

- Invalid data passed by the member program.
- Errors in the interface modules.
- Environmental errors (for example, overlaid control blocks or storage problems).
- Problems in SCI resource cleanup for an SCI that is currently terminating.

Problems can occur in SCI resource cleanup or timing conditions for an SCI that is currently terminating when an SCI address space is forced to terminate and certain SCI resources were not cleaned up.

For abends in the SVC routines, the SVC recovery routine issues this message and produces an SDUMP of the member address space and the SCI address space, if possible. The recovery routine also logs diagnostic information to the LOGREC data sets and attempts to clean up resources associated with the service request.

If the abend occurred at a point where the recovery routine can safely retry, it retries and returns a nonzero return code to the member. If the abend occurred at a point where recovery is not possible because the status is unknown, then the abend is not retried. In these

cases, the member might be abended or the service request might never complete.

System Action: When an abend occurs in the SCI registration or deregistration SVC, the SVC recovery routine receives control from z/OS. The recovery routine analyzes the abend, takes appropriate recovery action, and gathers diagnostic data.

System Programmer Response: Save a copy of the dump and save or print a copy of the LOGREC records pertaining to this abend. If the member is an IBM product (for example, IMS, OM, or RM), contact the IBM Support Center. If the member is not an IBM product, contact the supplier of the member.

Module: CSLSRG20, CSLSDR20

CSL3118E RES MGR ABEND abend_code MEMBER member_name PSW=psw RSN=rsn module_name=module_address status

Explanation: An abend occurred in an SCI MVS Resource Manager.

In the message text:

abend_code
The abend that occurred (Sxxx for system abends and Uxxxx for user abends).

member_name
The name of the member for which the resource manager was running. *member_name* will always be SCI for CSLSRM00.

psw The PSW (program status word) contents at the time of the abend.

rsn The abend reason code, if any, or N/A.

module The name of the module in which the abend occurred.

module_address
The address of the module in which the abend occurred.

status Text that indicates where the abend occurred in the SCI MVS Resource Manager processing. The possible values are:

CMBR VALIDTE
The abend occurred while CSLSRM20 was attempting to validate the CMBR that was passed to the module.

DECR ACT CNT
The abend occurred while CSLSRM20 was decrementing the active connection count in the MGBL block.

DEQ The abend occurred while CSLSRM20 was releasing an ENQ with a DEQ.

IXCLEAVE
The abend occurred while CSLSRM20 was leaving the XCF group.

MBR NOTIFY
The abend occurred while CSLSRM00 was notifying the local IMSplex members that SCI has terminated. Outstanding requests are also POSTed as part of this process.

PGBL RESET
The abend occurred while CSLSRM00 was resetting the active flag in the PGBL blocks.

PURGEDQ
The abend occurred while CSLSRM20 was issuing the MVS PURGEDQ.

SCHED SR40
The abend occurred while CSLSRM20 was scheduling CSLSSR40 in the SCI address space.

STORAGE RLSE
The abend occurred while CSLSRM00 was releasing storage after completing the notification of the local IMSplex members.

SCI MVS Resource Manager abends can have several causes:

- Errors in the interface modules.
- Environmental errors (for example, overlaid control blocks or storage problems).

Problems in the resource managers should be rare. However, when one of the modules abends, it will recover and if possible, continue with the cleanup.

For abends in the resource manager routines, the recovery routine issues this message and produces an SDUMP of the member address space and the SCI address space, if possible. The recovery routine also logs diagnostic information to the LOGREC data sets and attempts to clean up resources associated with the service request.

If the abend occurred at a point where the recovery routine can safely retry, it will retry. If the abend cannot be retried because of the particular abend or z/OS indicates that retry is not possible, the resource manager will not finish the cleanup and the cleanup complete message will not be issued.

System Action: When an abend occurs in an SCI MVS Resource Manager routine, the recovery routine receives control from z/OS. The recovery routine analyzes the abend, takes appropriate recovery action, and gathers diagnostic data.

System Programmer Response: Save a copy of the

dump and save or print a copy of the LOGREC records pertaining to this abend. Contact the IBM Support Center.

Module: CSLSRM00, CSLSRM20

CSL3119E SRB ABEND *abend_code* **MEMBER** *member_name* **PSW=***psw* **RSN=***rsn module_name=module_address status*

Explanation: An abend occurred in an SCI SRB routine that runs in the SCI address space.

In the message text:

abend_code The abend that occurred (S*xxx* for system abends and U*xxxx* for user abends).

member_name The name of the member from which the SRB was scheduled, if available, or N/A if not available.

psw The program status word (PSW) contents at the time of the abend.

rsn The abend reason code, if any, or N/A if not available.

module_name The name of the module in which the abend occurred.

module_address The address of the module in which the abend occurred.

status The text that indicates where the abend occurred in the SCI SRB processing.

The *status* can be one of the following:

- **AFTER ENQUEUE**

  The abend occurred after the AWE was enqueued.
- **AFTER ENQUEUE ER**

  The abend occurred after an error was encountered enqueueing the AWE.
- **AFTER RQST RET**

  It was determined that a remote request was being processed and the abend occurred after an error was encountered enqueueing the AWE and after the request was returned.
- **BEFORE ENQUEUE**

  The abend occurred before the AWE was enqueued.
- **BEFORE RQST RET**

  It was determined that a remote request was being processed and the abend occurred after an error was encountered enqueueing the AWE but before the request could be returned.
- **IN ENQUEUE**

  The abend occurred while the AWE was being enqueued.
- **REG RETURN**

  The abend occurred after the registration was returned.
- **STATUS UNKWN**

  The recovery routine could not determine the status of the member service request when the abend occurred.

Abends should not occur in the SCI SRB routines that run in the SCI address space. If an abend does occur, it is probably due to an overlay or some other error condition that is not related to the data that is being sent to the SCI address space.

For abends in the SRB routines, the SRB recovery routine issues this message and produces an SDUMP of the SCI address space. The recovery routine also logs diagnostic information to the LOGREC data sets.

If the abend occurred at a point where the recovery routine can safely retry, it retries. The member may or may not be notified that an error occurred. If the abend occurred at a point where recovery is not possible because the status is unknown, the abend is not retried.

System Action: When an abend occurs in an SCI SRB routine running in the SCI address space, the SRB recovery routine receives control from z/OS. The recovery routine analyzes the abend, gathers diagnostic data and takes appropriate recovery action.

System Programmer Response: Save a copy of the dump and save or print a copy of the LOGREC records pertaining to this abend. Contact the IBM Support Center.

Module: CSLSSR30, CSLSSR40, CSLSSR60

CSLM Messages

This topic explains the messages issued by the TSO Single Point of Control (SPOC).

CSLM001I (C) Copyright IBM Corp. 2000. All rights reserved.

Explanation: This message issues IBM's copyright statement.

System Action: Processing continues.

User Response: None.

Module: DFSSPOC

CSLM007I The response has expired. The command response is not available.

Explanation: You attempted to display the command response information in the command status panel. However, the original command response is no longer available for viewing. Command responses are discarded when you log off of TSO SPOC or when you exit the DFSSPOC module and reply `Erase Command Responses`.

System Action: Processing continues.

User Response: If you want to re-issue the command, enter `I` in the line command area on the left margin of the DFSSPOC command status list.

Module: DFSSPOC

CSLM008I The expanded command was not issued.

Explanation: You entered the Expand Command panel but issued the `Cancel` command to exit instead of pressing the PF3 commit key. As a result, the `Expand` command was not issued.

System Action: The command is not issued.

User Response: When you use the Expand Command panel, exit it with the End key. Be sure that the Auto-save function is on in the editor session.

Module: DFSSPOC

CSLM009I The return code from the editor is not recognized, return code= *editrc*

Explanation: TSO SPOC received an unrecognized return code from the ISPF editor after you exited the `Expand` Command panel. The Expand command was not issued.

System Action: Processing continues.

User Response: For information on the editor return codes, see the *OS/390 Interactive System Productivity Facility (ISPF): Services Guide*. Investigate and resolve the problem.

Module: DFSSPOC

CSLM012I The user preferences have not been set. Please set them now using the Preferences panel from the Options list.

Explanation: The user preferences in the Preferences panel must be set before commands can be issued, including specifying the IMSplex name. An IMSplex name consists of eight characters. The first three characters are automatically assigned the prefix of "CSL". The last five characters are available for you to assign. For example: CSL*xxxxx*. When you assign the last five characters, do not use "CSL" again.

System Action: Commands will not be accepted until the preferences are set.

User Response:

1. From the menu, select **Options**, then **Preferences**. The Preferences panel displays.
2. Enter the appropriate values for the preferences, and then press Enter.

To leave the Preferences panel without making changes, press the Cancel (F12) key.

Module: DFSSPOC

CSLM013I The information was written to the ISPF list file.

Explanation: The command response information was written to the ISPF list file.

If you want, you can route the file to a printer when you exit ISPF. You can also use other utilities to print the contents of the file.

System Action: Processing continues.

User Response: None.

Module: DFSSPOC

CSLM014W There is a problem with the LIST file. The information was not written.

Explanation: An error occurred when information was being written to the ISPF list file.

System Action: The command response information was not written to the ISPF list file.

User Response: The ISPF list files are named *your_prefix*.SPF*n*.LIST. The *your_prefix* variable identified the prefix you specified for the list files, and *n* is a number between zero and nine. Make sure the files are available and have space sufficient for the amount of data that will be saved to them.

Module: DFSSPOC

CSLM015W A group name must be provided for a group definition.

Explanation: An entry was added in the Group Definition panel; however, no group name was provided.

System Action: A question mark is inserted as the group name.

User Response: Specify a group name in the Group Definition panel. The group name uses normal PDS member name syntax.

Module: DFSSPOC

CSLM016I Group *group* has been added.

Explanation: The TSO SPOC successfully added the new group to the group definitions table.

System Action: The new group was successfully added to the group definitions table.

User Response: None.

Module: DFSSPOC

CSLM017I A group named *group* already exists.

Explanation: The group name identified by *group* was added to the Group Definition panel in the **New Group** field; however, the name already exists in the group definitions table.

System Action: The duplicate group name was added to the group definition table but a question mark was added as a prefix.

User Response: Modify the duplicate group name so that it is a unique name and remove the question mark.

Module: DFSSPOC

CSLM018I Group *group* has been deleted.

Explanation: The group identified by *group* was successfully deleted from the group definitions table.

System Action: The group was successfully deleted.

User Response: None.

Module: DFSSPOC

CSLM019I Group *group* has been changed.

Explanation: The TSO SPOC successfully processed the changes to the group definition identified by *group*.

System Action: The changes were made to the group definitions table. The information is saved to the ISPTABL file when you press the Cancel key to escape the panel and return the TSO SPOC main panel.

User Response: None.

Module: DFSSPOC

CSLM020I Group *group* will now be used for default routing.

Explanation: The **S** option was specified in the action column of the TSO SPOC group definition panel. As a result, the group identified by *group* will be used for default routing.

System Action: TSO SPOC will now use *group* as the default for routing TSO SPOC commands.

User Response: None.

Module: DFSSPOC

CSLM026I There is no information to save or print.

Explanation: You attempted to print information or use the **Save As** option, but there is currently no information on a command response to print or save.

System Action: No information is printed or saved to the output file.

User Response: Issue the command on which you would like information, and then use the **Save As** or **Print** option again.

Module: DFSSPOC

CSLM027E Program DFSSPOC cannot run outside of ISPF.

Explanation: The TSO SPOC program needs ISPF dialog services to process correctly. TSO SPOC must be invoked from within ISPF.

System Action: The TSO SPOC was not started.

User Response: Start ISPF and then issue the `DFSSPOC` command from an ISPF command line.

Module: DFSSPOC

CSLM048I Search for *string* was successful.

Explanation: The **Find** menu option or RFIND key found the text identified by *string*.

System Action: The cursor is positioned on the search string that was found. The display might have scrolled to display the search string.

User Response: None.

Module: DFSSPOC

CSLM049I Text *string* not found. Press RFIND key to continue from the top.

Explanation: The text indicated by *string* was not found in the command response log.

System Action: The search string was not found.

User Response: Press the RFIND key (F5) to search

from the top of the command response log.

Module: DFSSPOC

CSLM050I The command was issued, see Command Status for results.

Explanation: The command you just entered was issued. Your preferences indicated that TSO SPOC should not wait for a response. The response information is available only from the Command Status panel.

System Action: Processing continues.

User Response: Use the action bar to switch to the Command Status panel. When the command completes, type the selection character (/) and press Enter to display the command response log.

Module: DFSSPOC

CSLM051I The command has been deleted.

Explanation: The entry in the command status table was deleted at your request.

System Action: The command was deleted and is no longer in the command status table.

User Response: None.

Module: DFSSPOC

CSLM052W Unrecognized line command.

Explanation: The line command that was just entered in the Action column of the command status display is not a supported line command.

System Action: The invalid line command was removed from the display. If no other line commands were issued, the cursor remains on the same line.

User Response: For a list of valid line commands, place the cursor in the Action column and press F1.

Module: DFSSPOC

CSLM053E DFSSPOC severe error - getmain failed.

Explanation: TSO SPOC needed virtual storage and could not get it.

System Action: Processing continues.

User Response: Ensure that the region size specified at logon is adequate for the commands issued and for the other applications that are active in your TSO user address space. If possible, specify a larger region size.

Module: DFSSPOC

CSLM055I Data sorted by *column_name* in ascending order

Explanation: The user asked to sort the data by the column name indicated by *column_name*. The default for the sort is to present the data in ascending order. If you requested descending order, the message text indicates “descending” instead. The sort can be initiated by using the action bar or by positioning the cursor on the column heading and pressing enter.

System Action: The list displays in the desired sort order.

User Response: None.

Module: DFSSPOC

CSLM056I The command selected has not yet completed.

Explanation: You typed a selection character ('/) in the command status panel, but the command response is not available yet because the command has not completed.

System Action: No action is performed.

User Response: Wait until the command completes. The status list will be refreshed when you press the Enter key. After the Status column indicates `Complete`, the command response can be selected again.

Module: DFSSPOC

CSLM057I Find canceled by the cancel command.

Explanation: The Find panel displayed but instead of pressing the Enter key to process, you pressed the Cancel key.

System Action: Any data typed in the Find panel was discarded. The command response log is not searched.

User Response: If you wanted to run a text search, bring up the Find panel again. Enter the search string and press the Enter key.

Module: DFSSPOC

CSLM058W The WAIT parameter has invalid syntax.

Explanation: The **WAIT** field does not contain the correct syntax format.

System Action: The command was rejected.

User Response: Change the **WAIT** field to the correct format. The format is either SSSS (seconds) or MMM:SS (minutes: seconds).

Module: DFSSPOC

CSLM059I You must type '/' to confirm the removal of the group.

Explanation: When a group is deleted from the TSO SPOC Group Definition panel and the group name is listed in the default route list, you must confirm the removal of the group from the route list by entering a forward slash (/).

System Action: No action is performed until the removal is confirmed or until you Cancel the removal by pressing the F12 key.

User Response: To confirm removal of the group from the default route list, enter the forward slash (/) and press Enter.

Module: DFSSPOC

CSLM060I Removal of the group was canceled by CANCEL command.

Explanation: The removal of the group from the default route list was not confirmed. The Cancel key was pressed instead.

System Action: The group name remains in the default route list.

User Response: If the Cancel key was pressed by mistake, you must reissue the `D` command in the **Act** field.

Module: DFSSPOC

CSLM062I The changes to the group were canceled by CANCEL command.

Explanation: You were prompted to correct a problem that was found when a group definition was changed, and you canceled the change.

System Action: The prior definition of the group is restored.

User Response: None.

Module: DFSSPOC

CSLM063I The information was saved to *svadsn*.

Explanation: The response from the type-1 or type-2 command was saved to the data set you specified, indicated by *svadsn*.

System Action: The command response data is saved to *svadsn*.

User Response: None.

Module: DFSSPOC

CSLM064W There is a problem with the SAVE file. The information was not saved.

Explanation: A problem occurred when the command response information was being saved.

System Action: The information is not saved to the Save file.

User Response: Ensure that the data set you specified exists and that it has appropriate attributes. The data set should be a partitioned data set or a sequential data set with the record format of FB or VB. The record length should be 120 characters. Ensure that the data set is large enough to hold the number of records that will be written.

Module: DFSSPOC

CSLM065I A shortcut command name must be provided for a shortcut command definition.

Explanation: You created a shortcut in the TSO SPOC Command Shortcuts panel, but you did not specify a command name.

System Action: The shortcut is added to the list with a name of `?`.

User Response: Modify the command name to create a unique name in the shortcuts table. Remove the entry with the question mark by using the `D` line command in the Action column and pressing Enter.

Module: DFSSPOC

CSLM066I Shortcut command *text* has been added.

Explanation: The command indicated by *text* was added to the TSO SPOC command shortcuts table.

System Action: The new entry is added to the table in alphabetical sequence. The New Entry line continues to display. The new entry might not be visible if there are already several command shortcuts defined.

User Response: None.

Module: DFSSPOC

CSLM067I A shortcut command named *text* already exists.

Explanation: You created a shortcut command in the TSO SPOC Command Shortcuts panel, but the command name already exists in the shortcut table.

System Action: The shortcut name is added to the shortcut table list with a question mark prefix, (*?*).

User Response: Modify the command name to create a unique name in the shortcuts table. Remove the entry with the question mark by using the `D` line command in the Action column, and press Enter.

Module: DFSSPOC

CSLM068I Shortcut command *shrtcmd* has been deleted.

Explanation: The command shortcut identified by *shrtcmd* was successfully deleted from the shortcut definitions table.

System Action: The shortcut command is deleted.

User Response: None.

Module: DFSSPOC

CSLM069I Shortcut command *shrtcmd* has been changed.

Explanation: TSO SPOC successfully processed the changes to the command shortcut identified by *shrtcmd*.

System Action: The changes are made to the table used by the Command Shortcut panel. The information is saved to the ISPTABL file when you press the Cancel key to return the TSO SPOC main panel.

User Response: None.

Module: DFSSPOC

CSLM070I The member name was not specified.

Explanation: You specified the name of a partitioned data set, but you did not specify a member name.

System Action: No action is taken.

User Response: Either specify a member name, or change the name of the data set to a sequential data set.

Module: DFSSPOC

CSLM071W *savedsn* has an unsupported record format.

Explanation: The data set you specified in the **Save As** options panel does not have a supported record format. Only FB and VB data sets are supported.

System Action: The data is not saved.

User Response: Use a different data set for the **Save As** data set, or redefine this data set with FB or VB.

Module: DFSSPOC

CSLM072W *savedsn* has an unsupported dataset type: *sysdsorg*.

Explanation: The data set specified identified by *savedsn* in the **Save As** options panel does not have a supported data set organization. Only sequential or partitioned data sets are supported.

System Action: The data set is not saved.

User Response: Use a different data set in the **Save As** options panel, or redefine this with either a partitioned or sequential data set organization.

Module: DFSSPOC

CSLM073W *sysmsglvl2*

Explanation: The LISTDSI built-in function of the TSO REXX processor returned a non-zero return code. This message contains the problem description returned by LISTDSI in REXX variable, *sysmsglvl2*.

System Action: The command response is not saved.

User Response: Refer to the *TSO/E REXX/MVS Reference* for information regarding this message.

Module: DFSSPOC

CSLM080I NO IMSPLEX DATA FOUND FOR THIS COMMAND

Explanation: The user requested the “Print All” function, but this command response does not contain IMSplex information.

System Action: Only the type-1 IMS command output is added to the ISPF list file.

User Response: No user response is required.

Module: DFSSPOC

CSLN Messages

This topic explains the messages that might be issued from an IBM single point of control application in response to situations in the Operations or the Common Service Layer (CSL).

CSLN002W The IMS SCI is not available.

Explanation: The Structured Call Interface (SCI) is not active for the IMSplex specified as the default or the IMSplex you specified to over-ride the default.

System Action: The command is rejected.

User Response: Make sure that the SCI address space for the specified IMSplex has been started. Ensure that other IMSplex members have been started.

Module: DFSSPOC, IMS Control Center

CSLN004W You are not authorized to use the IMS SPOC with this IMSplex.

Explanation: The RACF profiles indicate that the TSO user ID is not authorized to register with this SCI.

System Action: The command is rejected.

User Response: Make sure the name of the IMSplex is typed correctly.

Programmer Response: You are attempting to access an IMSplex (CSL.*imsplex_name* in the Facility class) with a TSO user ID that is not authorized. The user ID must have at least update authority. Contact your security administrator to have the RACF profile for this user ID created or modified.

Module: DFSSPOC, IMS Control Center

CSLN005W The command issued was rejected. return code=*rc* reason=*reason*

Explanation: The command that was issued through SPOC was rejected by the processor for an unknown reason, indicated by an *rc* of X'02000008'. For more information on return and reason codes, see "CSLOMCMD Return and Reason Codes" on page 30.

System Action: The command was rejected.

Programmer Response: For more information, see "CSLOMCMD Return and Reason Codes" on page 30.

Module: DFSSPOC, IMS Control Center

CSLN011W The command entered has more than one filter specified.

Explanation: This message is issued if you enter mutually exclusive filters (keywords) in the command. For example, this message would be issued if `TYPE` and `STATUS` are both specified on a `QUERY IMSPLEX` command.

System Action: The command that was just entered was rejected.

User Response: Make sure that the command syntax is correct.

Module: DFSSPOC, IMS Control Center

CSLN023I At least one request was successful.

Explanation: A command was routed to multiple clients. At least one client was able to process the request successfully and return either command response data or a response message.

System Action: If the type-2 command response is available, it is returned to you. If the response is not available, the command response is displayed in the SPOC log display.

User Response: For additional information, see "CSLOMCMD Return and Reason Codes" on page 30. You might need to switch to the LOG display to see the completion codes.

Module: DFSSPOC, IMS Control Center

CSLN024I No requests were successful.

Explanation: The entries were processed but no information was returned. The command you just issued was routed to multiple clients but none of the clients were able to process the request successfully.

System Action: No command response data or response messages were returned by any client.

User Response: For additional information, refer to the completion codes for the request in the log panel.

Module: DFSSPOC, IMS Control Center

CSLN028E An internal error was detected. return code=*omrcx* reason=*omreax*

Explanation: An error occurred. For more information, see "CSLOMCMD Return and Reason Codes" on page 30 and "CLSOMREG Return and Reason Codes" on page 33 or *IMS Version 9: Common Service Layer Guide and Reference* for information about CSLOMI.

System Action: Processing continues.

User Response: See "CSLOMCMD Return and Reason Codes" on page 30 for an appropriate response.

Module: DFSSPOC, IMS Control Center

CSLN029W The command contains an invalid primary keyword or no client registered for the keyword.

Explanation: The primary keyword on the command you just entered is invalid. The keyword itself might be invalid or the client for the keyword might not be registered.

System Action: The command is rejected.

User Response: Make sure that the command syntax is correct. If the syntax is correct, issue the `QUERY IMSPLEX` command to determine if the client is available. If the client is not available, contact your System administrator.

Module: DFSSPOC, IMS Control Center

CSLN030W The command timed out.

Explanation: The command timed out before all of the command response information could be collected. One or more clients might not be responding or a client might have needed more time to process the command.

If your preferences are set to wait for command response information, the command that timed out is the last command you entered. If your preferences are set to continue processing, check the command status table to determine which command timed out.

System Action: All command response information that was collected prior to the time-out is returned.

User Response: If a wait interval was specified in the Preferences panel, ensure it is long enough to allow for the command to process.

If an interval was not specified, the interval defaults to five minutes. Specify an interval longer than five minutes to give the command time to process.

Module: DFSSPOC, IMS Control Center

CSLN031W The input exit rejected your command.

Explanation: The INPUT exit rejected the command that was just entered.

System Action: The command was rejected.

User Response: The INPUT exit was written by one of your programmers. Consult with your IMS programmer to determine why the INPUT exit rejected the command.

Module: DFSSPOC, IMS Control Center

CSLN032I The command ROUTE list was overridden with 'ANY'.

Explanation: The command processor (indicated in the corresponding messages section of the log) was specified in the ROUTE list for the command entered, but was overridden with the ANY option. This option indicates that the command can be routed to any command-processing client.

System Action: The command was routed to the first available command processing client in the route list if a route list was specified. If a route list was not specified, the Operations Manager sent the command to the first client in the chain.

User Response: None

Module: DFSSPOC, IMS Control Center

CSLN033I The command ROUTE list was overridden with 'ALL'.

Explanation: The command processor (indicated in the messages section) was specified in the ROUTE list for the command entered, but was overridden with ALL. This option indicates that the command was routed to all command processing clients.

System Action: The command is routed to all command processing clients. The route list is ignored.

User Response: None.

Module: DFSSPOC, IMS Control Center

CSLN034W The command entered contains an invalid keyword.

Explanation: The command you just entered contains an invalid keyword.

System Action: The command was rejected.

User Response: Make sure the command syntax is correct.

Module: DFSSPOC, IMS Control Center

CSLN035W The command entered contains an unknown positional parameter.

Explanation: BPE detected an unknown positional parameter in the command that was just entered.

System Action: The command is rejected.

User Response: Make sure that the command syntax is correct.

Module: DFSSPOC, IMS Control Center

CSLN036W The command entered contains an invalid keyword sublist.

Explanation: A keyword was specified with an equal sign, `keyword=`, but the keyword is defined with a sublist of values, `keyword()`. Sublists must be specified in parenthesis.

System Action: The command was rejected.

User Response: Make sure that the command syntax is correct.

Module: DFSSPOC, IMS Control Center

CSLN037W The command entered contains an incomplete keyword parameter.

Explanation: An incomplete keyword or keyword parameter was specified in the command that was just entered.

System Action: The command was rejected.

User Response: Make sure that the command syntax is correct.

Module: DFSSPOC, IMS Control Center

CSLN038W The command entered is missing a required parameter.

Explanation: A required parameter is missing from the command that was just entered.

System Action: The command was rejected.

User Response: Make sure that the command syntax is correct.

Module: DFSSPOC, IMS Control Center

CSLN039W The command entered contains an invalid keyword parameter value.

Explanation: An invalid keyword parameter was specified for a keyword in the command that was just entered.

System Action: The command was rejected.

User Response: Make sure that the command syntax is correct.

Module: DFSSPOC, IMS Control Center

CSLN040W The command entered contains duplicate keywords.

Explanation: A duplicate keyword was specified in the command that was just entered.

System Action: The command was rejected.

User Response: Make sure that the command syntax is correct.

Module: DFSSPOC, IMS Control Center

CSLN041W The command entered has an invalid syntax.

Explanation: The command that was just entered contains invalid syntax. Text containing the syntax error is returned in the message section of the command response log.

System Action: The command was rejected.

User Response: Make sure that the command syntax is correct.

Module: DFSSPOC, IMS Control Center

CSLN042W The command processing client required to process this command is not ready.

Explanation: The command that was just entered could not be processed by the command processor indicated in messages section of the command response log. The command processor was not ready to process commands.

System Action: The command was rejected.

User Response: Reissue the command after the command processor is ready.

Module: DFSSPOC, IMS Control Center

CSLN043W The command processing client required to process this command is not registered.

Explanation: The command that was just entered could not be processed by the command processor indicated in the message section of the command response log. The command processor is not registered to processes this command.

System Action: The command is rejected.

User Response: Make sure that the entry in the **Route** field is correct and that the correct command was issued.

Module: DFSSPOC, IMS Control Center

CSLN044W The system required to process this command is not active in this IMSPLEX.

Explanation: The command that was just entered could not be processed by the command processor indicated in the Member section of the command response log. The command processor is not active in the IMSPlex.

System Action: The command was rejected.

User Response: Make sure that the entry in the **Route** field is correct and that the command processor is active.

Module: DFSSPOC, IMS Control Center

CSLN045W Your userid is not authorized to issue this command.

Explanation: The command that was just entered could not be processed. The TSO user ID that issued the command is not authorized. Examine the log information to determine why the client is not authorized.

System Action: The command was rejected.

User Response: You might need to consult with your security administrator to create or modify the RACF profiles. The profiles that control IMS commands are in the OPERCMDS class. For more information about specific resource names, see the *IMS Version 9: Command Reference*.

Module: DFSSPOC, IMS Control Center

CSLN046W The command entered contains an invalid verb or no client registered for the verb.

Explanation: The command that was just entered is invalid. The command itself might be invalid, or the client for the command might not be registered currently.

System Action: The command was rejected.

User Response: Make sure that the command syntax is correct. Issue a `QUERY IMSPLEX` command to determine if the client is available. If the client is not available, contact your System administrator.

Module: DFSSPOC, IMS Control Center

CSLN054I No clients returned return code 0. Check return code(s)

Explanation: The command was routed to multiple clients. None of the clients that processed the command returned a return code 0 and reason code 0 to the Operations Manager. For information on the CSLOMCMD return and reason code, see the *IMS Version 9: Common Service Layer Guide and Reference*.

System Action: At least one command client returned either command response data or a response message.

User Response: Examine the TSO SPOC log display or the IMS Control Center results window to determine the return and reason codes from each command processor. The log might also contain additional messages that identify the problem.

Module: DFSSPOC, IMS Control Center

CSLN055I THE COMMAND COMPLETED WITH WARNING(S) CHECK RETURN CODE(S)

Explanation: The command was routed to multiple clients. Not all the clients that processed the command returned a return code 0 and reason code 0 to the Operations Manager. In addition, at least one client member returned return code 4. For information on the CSLOMCMD return and reason code, see the *IMS Version 9: Common Service Layer Guide and Reference*.

System Action: At least one command client returned either command response data or a response message.

User Response: Examine the TSO SPOC log display or the IMS Control Center results window to determine the return and reason codes from each command processor. The log might also contain additional messages that identify the problem.

Module: DFSSPOC, IMS Control Center

CSLN061W The Operations Manager is not available.

Explanation: OM is not available and CSLSCRQS issued a return code X'010000010' and reason code X'0000400C'. For more information on CSLSCRQS and CSLSCMSG service and return codes, see the *IMS Version 9: Common Service Layer Guide and Reference*.

System Action: The command was rejected.

User Response: Determine the reason that OM was not active, then contact your System Administrator to have OM (re)started.

Module: DFSSPOC, IMS Control Center

CSLN070W User Id cannot be greater than 8 characters

Explanation: The user ID entered contains more than eight characters.

System Action: User login rejected.

User Response: Make sure a valid user ID is entered.

CSLN071W Password cannot be greater than 8 characters

Explanation: The password entered contains more than eight characters.

System Action: User login rejected.

User Response: Make sure a valid password is entered.

CSLN072W You must enter a User Id

Explanation: User ID was not provided on the Login dialog.

System Action: User login rejected.

User Response: Make sure a valid user ID is entered.

CSLN073W You must enter a Password

Explanation: A password was not provided on the Login dialog.

System Action: User login rejected.

User Response: Make sure a valid password is entered.

CSLN074E Invalid client data returned

Explanation: During login processing, the IMSplex attempted to return data about IMSplex members. This data was corrupted when received.

System Action: None.

User Response: Try to login again. If the error continues, contact the IBM Support Center for help.

CSLN075E Invalid syntax data returned

Explanation: During login processing, the IMSplex attempted to return data about available commands. This data was corrupted when received.

System Action: None.

User Response: Try to login again. If the error continues, contact the IBM Support Center for help.

CSLN076E This group has no assigned members

Explanation: No members were assigned to the group folder from which you launched the wizard.

System Action: None.

User Response: Change the group folder and select at least one member.

CSLN077E The IMSplex system name that you are adding already exists

Explanation: The user was trying to add or define a duplicate IMSplex system using the Add System dialog.

System Action: None.

User Response: Choose a different IMSplex name.

CSLN078E A group with this name already exists

Explanation: A user was trying to add or define a duplicate group using the Add Groups dialog.

System Action: None.

User Response: Choose a different group name to be added.

CSLN079E You entered a folder name that is reserved

Explanation: The user was trying to define a group name that is reserved.

System Action: None.

User Response: Choose a different group name.

CSLN080E Please make a selection from page(s) *pagename*

Explanation: A selection on wizard page(s), identified by *pagename*, is required but not being selected.

System Action: None.

User Response: Make the required selection on the wizard page(s).

CSLN081E Internal error, Return Code:<rc>

Explanation: Internal error encountered.

System Action: None.

User Response: Contact the IBM Support Center for help.

CSLN082E Enter valid port number

Explanation: The user was trying to input port number with nonnumeric value.

System Action: None.

User Response: Choose port number with numeric value.

CSLN082W The IMSplex system name that you are changing to already exists

Explanation: Message `CSL082W` is issued because a change to the name of an existing IMSplex system (using the Change System dialog) was attempted, but the proposed new name is currently assigned to another IMSplex system.

System Action: None.

User Response: Make sure the new system name is the one that you want.

CSLN085E Invalid hostname entered.

Explanation: The IP address provided on the Add/Change System dialog was invalid.

System Action: None.

User Response: Enter a valid IP address.

CSLN086E Error opening socket to host.

Explanation: The IP address provided on the Add/Change System dialog cannot be connected to.

System Action: None.

User Response: Check with your System Administrator on the status of the IP address.

CSLN087E Error receiving response from host.

Explanation: The IP address provided on the Add/Change System dialog cannot be connected to.

System Action: None.

User Response: Check with your System Administrator on the status of the IP address.

CSLN088E Error sending command to host.

Explanation: Internal error occurred while receiving data.

System Action: None.

User Response: Contact the IBM Support Center for help.

CSLN090E Invalid IMSplex name

Explanation: The IMSplex name specified on the Add System dialog cannot be connected to because this name is not currently defined.

System Action: None.

User Response: Enter an IMSplex name that is currently defined on the host.

CSLN092E IMS Connect in shutdown.

Explanation: IMS Connect was in shutdown state and the connection to the IMSplex could not be established.

System Action: None.

User Response: Restart IMS Connect.

CSLN093E Error detected by SCI. Reason code:<rsn>

Explanation: IMS Connect encountered error that was detected by the SCI in the IMSplex. For more information on the <rsn> code, see "CSLOMI Return and Reason Codes" in the *IMS Version 9: Common Service Layer Guide and Reference*.

System Action: None.

User Response: See "CSLOMI Return and Reason Codes" in the *IMS Version 9: Common Service Layer Guide and Reference* for the appropriate response.

CSLN094E Connection to host does not exist

Explanation: Socket connection to the host failed.

System Action: None.

User Response: Check with your System Administrator on the status of the IP address.

CSLN095E Invalid response from host

Explanation: The length of data returned from IMS Connect was invalid.

System Action: None.

User Response: If the IMS Connect Recorder is not open when this message appears, open the Recorder and retry the action that caused the error.

When the IMS Connect Recorder is open and you receive message CSLN095E:
1. Close the Recorder
2. Capture the Recorder's output with IMS Connect's IDCAMS job
3. Contact the IBM Support Center for help

CSLN096E Error detected by IMS Connect: Return Code:<rc> Reason Code:<rsn>

Explanation: IMS Connect encountered an error. For more information about the return code and reason code, see the *IMS Connect Guide and Reference*, SC27-0946.

System Action: None.

User Response: See the *IMS Connect Guide and Reference* for the appropriate response.

CSLN097E Connection to IMSplex is terminating

Explanation: IMS Connect acknowledged the connection to the IMSplex was being terminated. The SCI that IMS Connect was registered to was being shutdown.

System Action: None.

User Response: Determine the reason that caused the SCI to be shut down and correct this situation.

CSLN099E Connection to IMSplex has been stopped

Explanation: IMS Connect was not able to communicate with SCI in the IMSplex. The SCI address space in the IMSplex has been stopped.

System Action: None.

User Response: Determine why the SCI address space has stopped. Remedy the problem, restart SCI, and try to reconnect.

CSLN101E Security failure

Explanation: IMS Connect RACF authentication was turned on and the RACF call made by IMS Connect failed. The user ID or password or both entered from the User Login dialog might be invalid.

System Action: None.

User Response: See the IMS Connect error message on the system console to determine the error and provide a valid user ID, password, or both.

CSLN102E IMS Connect protocol error

Explanation: IMS Connect detected a communication protocol error. For example, the Control Center is in the wrong state while sending data through IMS Connect.

System Action: None.

User Response: Take an SDUMP of the IMS Connect address space and contact the IBM Support Center for help.

CSLN103E Error detected by OM. Reason Code:<rsn>

Explanation: IMS Connect encountered error that was detected by the OM in the IMSplex. For more information on the reason code, see "CSLOMI Return and Reason Codes" in the *IMS Version 9: Common Service Layer Guide and Reference*.

System Action: None.

User Response: See "CSLOMI Return and Reason Codes" in the *IMS Version 9: Common Service Layer Guide and Reference* for an appropriate response.

CSLN105E Invalid command shortcuts file.

Explanation: The `cmdshortcuts.xml` file is corrupted.

System Action: None.

User Response: Contact the IBM Support Center for help.

CSLN106E I/O error when importing command shortcuts.

Explanation: I/O error occurred when reading `cmdshortcuts.xml` file.

System Action: None.

User Response: Contact the IBM Support Center for help.

CSLN107I Invalid verb or resource in the command.

Explanation: In the adding or changing default parameter window, either the verb or the resource is not valid in the command.

System Action: None.

User Response: Make sure the command being entered in the default parameter window contains valid command verb or resource.

CSLN108I The command you entered has already been used. Please use a different command.

Explanation: In the adding or changing default parameter window, the command you entered has been previously defined.

System Action: None.

User Response: Make sure the command being added or changed is the one you want. To modify an existing command, select the command and click the Change button to make your updates.

CSLN109I

Explanation: In the adding or changing short name window, the short name being added or changed did not begin with an ampersand (&).

System Action: None.

User Response: Add an ampersand (&) at the beginning of the short name.

CSLN110I The short name you entered contains a space. Spaces are not allowed in short names.

Explanation: In the adding or changing short name window, no space is allowed in the short name field.

System Action: None.

User Response: Remove the space in the short name field.

CSLN111I The short name you entered has already been used. Please use a different short name.

Explanation: In the adding or changing short name window, the short name you entered already exists.

System Action: None.

User Response: Define a different short name. To modify an existing short name, select the short name and click the “Change” button to make your updates.

CSLN112E Invalid character was found within the command; please remove the invalid character.

Explanation: The command entered in the command editor contained an invalid character.

System Action: None.

User Response: Remove the invalid character in the command and re-execute the command.

CSLN113E The command short name is not defined. Please define a short name.

Explanation: A command short name was attempted in the command editor but it has not been defined.

System Action: None.

User Response: Define the desired short name in the add short name window or correct the command and re-execute it.

CSLN114I Please select from the following keywords:

Explanation: The listed keywords in the command dialog are required but have no selections.

System Action: None.

User Response: Please make selections for the keyword controls listed with the message.

CSLN115E Error encountered during SSL processing.Error:

Explanation: Creation of secure socket failed. The error code explanation can be found in *Z/OS System Secure Sockets Layer Programming Guide*.

System Action: None.

User Response: Correct the error based on the explanation in *Z/OS System Secure Sockets Layer Programming Guide*.

CSL Return and Reason Codes

The following topic details the return and reason codes that can be issued in association with Common Service Layer messages. Error logs are issued in XML. For information on the tags used in the logs, see the *IMS Version 9: Common Service Layer Guide and Reference*.

To distinguish return codes from different components, each component uses a unique set of return codes on CSL macro calls. The first two characters identify the component that generated the return code. The last six characters of a return codes have the same meaning between components:

IMS Control Region 00

Structured Call Interface 01

Operations Manager 02

Resource Manager 03

The first two characters are used to determine where to find the documentation on the return and reason code values:

- IMS command return and reason codes are in DFSCMDRR.
- SCI return and reason codes are in CSLSRR.
- OM return and reason codes are in CSLORR.
- RM return and reason codes are in CSLRRR.

CSLZ return codes may be generated by SCI, OM, or RM so each return code is unique. CSLZ reason codes are the same regardless of the component generating the reason code and are documented in CSLZRR.

REXX SPOC API Return and Reason Codes

Table 77 lists the unique return and reason codes that can be returned when using the REXX Single Point of Control (SPOC). The REXX SPOC API might also produce the return codes from CSLSCREG or CSLOMCMD.

Table 77. REXX SPOC API Return and Reason Codes

Return Code	Reason Code	Meaning
00000000X	00000000X	The request completed successfully.
08000004X	00001000X	The command is still running.
08000008X	00002000X	The wait value is missing or invalid.
	00002008X	An IMSplex value is missing or invalid.
	00002012X	The STEM name is missing or invalid.
	00002016X	The token name is missing or invalid.
	00002020X	There are too many parameters.
	00002024X	The request token was not found.
	00002028X	The CART value is missing or invalid.
08000014X	00004000X	A GETMAIN failure occurred.

Chapter 10. DLIModel Utility Messages

This section describes the messages that are issued by the DLIModel utility.

The DLIModel utility message number severity suffixes are as follows unless otherwise indicated:

E Unrecoverable error

W Warning

I Informational message

DHB0001E System Error: *text* (*class/method*) (DHB0001E)

Explanation: This message describes a probable error in the DLIModel utility during the import of a PSB or DBD.

text Describes the problem.

(class/method)
Describes the location, class, or method name in the DLIModel utility at which the error was detected.

Explanation: Processing terminates abnormally.

Programmer Response: Contact the IBM Support Center and have the following information available:

- The content of this message
- The input PSBs and all related DBDs
- Control statement data set or file
- The JCL or UNIX® System Services command that you used to execute the utility

Problem Determination: You may be asked to rerun the DLIModel utility with the option parameter, `Trace=yes` set in order to aid in the problem determination.

2, 3, 8, 17d

DHB0002E ″PSB_STMTSET_NOFND″, ″PSB statement set for *psbname*″ not found (PSB.createPsb) (DHB0002E)

Explanation: The PSB source is either missing or invalid.

System Action: Processing terminates.

Programmer Response: Ensure that the input PSB source is valid. Verify that PSBGEN and ACBGEN have been successfully executed for this PSB.

Problem Determination: 2, 3, 8, 17d

Module: PSBImpl

DHB0003E Statement set for *psbname* not recognised as a PSB (PSB.createPsb) (DHB0003E)

Explanation: An invalid statement was found while processing the PSB input. Ensure that PSBGEN and ACBGEN have been successfully executed for this PSB.

System Action: Processing terminates.

Programmer Response: Ensure that the input PSB source is valid.

Problem Determination: 2, 3, 8, 17d

Module: PSBImpl

DHB0004E PSBGEN statement not found in statement set *psbname* (PSB.HandlePSB) (DHB0004E)

Explanation: PSBGEN statement not found in PSB input.

System Action: Processing terminates.

Programmer Response: Ensure that the input PSB source is valid. Verify that PSBGEN and ACBGEN have been successfully executed for this PSB.

Problem Determination: 2, 3, 8, 17d

Module: PSBImpl

DHB0005E Can not find DBD parameter in PCB in PSB *psbname* (″javaclass.method″) (DHB0005E)

Explanation: The DBDNAME parameter was not found in one of the PCBs for the PSB indicated.

System Action: Processing terminates.

Programmer Response: Ensure that the input PSB source is valid . Verify that PSBGEN and ACBGEN have been successfully executed for this PSB.

Problem Determination: 2, 3, 8, 17d

Module: DbPCBImpl

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DHB0006E PCB label and PCBName both present in PCB that refs DBD *dbdname* in stmnt set *psbname* (DbPCB.handleDbPCB) (DHB0006E)

Explanation: The PCB to use could not be determined.

System Action: Processing terminates.

Programmer Response: Ensure that the input PSB source is valid. Verify that DBDGEN, PSBGEN, and ACBGEN have been successfully executed for these DBDs and PSBs.

Problem Determination: 2, 3, 8, 17d

Module: DbPCBImpl

DHB0007E "INDEX_DBD_NOFND", "Index DBD *dbdname* refed by PROCSEQ not found in stmnt set *psbname*" (DbPCB.handleDbPCB) (DHB0007E)

Explanation: Index DBD not found.

System Action: Processing terminates.

Programmer Response: Ensure that all DBDs are in the source directory. Verify that DBDGEN, PSBGEN, and ACBGEN have been successfully executed for these DBDs and PSBs.

Problem Determination: 2, 3, 8, 17d

Module: DbPCBImpl

DHB0008E Statement set *dbdname* not recognised as a DBD ("javaclass.method") (DHB0008E)

Explanation: The DBD file is invalid.

System Action: Processing terminates.

Programmer Response: Verify the DBD source file is valid. Ensure that DBDGEN, PSBGEN, and ACBGEN have been successfully executed for these DBDs and PSBs.

Problem Determination: 2,3 ,8,17.

DHB0009E No LCHILD statement found in Index DBD *dbdname* (DBD.createDBD) (DHB0009E)

Explanation: The index DBD does not have an LCHILD statement.

System Action: Processing terminates.

Programmer Response: Verify that the PSB and DBDs are valid. Ensure that DBDGEN, PSBGEN and ACBGEN have been successfully executed for these DBDs and PSBs

Problem Determination: 2,3 ,8,17d,

Module: DBDImpl

DHB0010E Index DBD *dbdname* is a shared secondary index. Shared indices are not supported. (DBD.createDBD) (DHB0010E)

Explanation: The shared secondary indices are not supported.

System Action: Processing terminates.

Module: DBDImpl

DHB0011E Type of DBD *dbdname* not recognized (DBD.createDBD) (DHB0011E)

Explanation: This DBD type is not a recognized type.

System Action: Processing terminates.

Programmer Response: Verify that the DBD source file is valid . Ensure that DBDGEN, PSBGEN and ACBGEN have been successfully executed for these DBDs and PSBs

Problem Determination: 2, 3, 8, 17d

Module: DBDImpl

DHB0013E HSAM DBD *dbdname* not supported (DBD.createDBD) (DHB0013E)

Explanation: HSAM databases are not supported.

System Action: Processing terminates.

Module: DBDImpl

DHB0014E Physical parent not found for SEGM *segmentname*. (SegmentHierarchic.handleSegment) (DHB0014E)

Explanation: This is an internal error.

System Action: Processing terminates abnormally.

Programmer Response: First verify that DBDGEN, PSBGEN, and ACBGEN have been successfully executed for these DBDs and PSBs and then contact the IBM Support Center.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

Module: SegmentHierarchic Impl

DHB0015E Physical parent for SEGM *segmentname* is wrong type. (SegmentHierarchic.handleSegment) (DHB0015E),

Explanation: This is an internal error.

System Action: Processing terminates abnormally.

Programmer Response: First verify that DBDGEN, PSBGEN, and ACBGEN have been successfully executed for these DBDs and PSBs and then contact the IBM Support Center.

Problem Determination: 2,3 ,8,17d and dlimodeltrace output.

Module: SegmentHierarchic Impl

DHB0016E Logical parent not found for SEGM *segmentname* (″javaclass.method″) (DHB0016E)

Explanation: The logical child could not be found for the named segment.

System Action: Processing terminates abnormally.

Programmer Response: Verify that the PSB and DBDs are valid. Ensure that DBDGEN, PSBGEN, and ACBGEN have been successfully executed for these DBDs and PSBs.

Problem Determination: 2, 3, 8, 17d

DHB0017E Logical parent for SEGM *segmentname* is wrong type. (″javaclass.method″) ((DHB0017E)

Explanation: This is an internal error.

System Action: Processing terminates abnormally.

Programmer Response: First verify that DBDGEN, PSBGEN, and ACBGEN have been successfully executed for these DBDs and PSBs. Then contact the IBM Support Center.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0018E LCHILD of *segmentname* refs seg *segmentname* in DBD *dbdname*. Not found (″javaclass.method″) (DHB0018E)

Explanation: A logically related child segment cannot be found.

System Action: Processing terminates.

Programmer Response: Verify that the PSB and DBDs are valid. Ensure that DBDGEN, PSBGEN, and ACBGEN have been successfully executed for these DBDs and PSBs.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0019E Logical child pointers set in an invalid database type. DBD is *dbdname* (″javaclass.method″) (DHB0019E)

Explanation: The logical relationship is not correct.

System Action: Processing terminates.

Programmer Response: Verify that the PSB and DBDs are valid. Ensure that DBDGEN, PSBGEN, and ACBGEN have been successfully executed for these DBDs and PSBs.

Problem Determination: 2,3 ,8,17d and dlimodeltrace output

DHB0020E LCHILD of *segmentname* refs seg *segmentname* in DBD *dbdname* Seg is not an index segment . (″javaclass.method″) (DHB0020E)

Explanation: The logical relationship is not correct.

System Action: Processing terminates.

Programmer Response: Verify that the PSB and DBDs are valid . Ensure that DBDGEN, PSBGEN, and ACBGEN have been successfully executed for these DBDs and PSBs.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0021E LCHILD of *segmentname* refs seg *segmentname* in DBD *dbdname*. Seg is not a physical segment . (″javaclass.method″) (DHB0021E),

Explanation: The logical relationship is not correct.

System Action: Processing terminates.

Programmer Response: Verify that the PSB and DBDs are valid. Ensure that DBDGEN, PSBGEN, and ACBGEN have been successfully executed for these DBDs and PSBs.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0022E LCHILD of *segmentname* refs seg *segmentname* in DBD *dbdname*. That seg does not link to this seg as LP . (″javaclass.method″) (DHB0022E)

Explanation: The logical relationship is not correct.

System Action: Processing terminates.

Programmer Response: Verify that the PSB and DBDs are valid. Ensure that DBDGEN, PSBGEN, and ACBGEN have been successfully executed for these DBDs and PSBs.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0023E LCHILD of *segmentname* PAIR seg not found in this DBD *dbdname* (″javaclass.method″) (DHB0023E)

Explanation: The logical relationship is not correct.

System Action: Processing terminates.

Programmer Response: Verify that the PSB and DBDs are valid. Ensure that DBDGEN, PSBGEN, and ACBGEN have been successfully executed for these DBDs and PSBs.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0025E Segment segname in dbdtype DBD *dbdname* pairs with segment *segmentname* in DBD *dbdname*. But paired seg does not pair with this seg. (″javaclass.method″) (DHB0025E)

Explanation: The logical relationship is not correct.

System Action: Processing terminates.

Programmer Response: Verify that the PSB and DBDs are valid. Ensure that DBDGEN, PSBGEN, and ACBGEN have been successfully executed for these DBDs and PSBs.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0026E Pair relationship set in an invalid database type, DBD: *dbdname*. (″javaclass.method″) (DHB0026E)″},

Explanation: The logical relationship is not correct.

System Action: Processing terminates.

Programmer Response: Verify that the PSB and DBDs are valid. Ensure that DBDGEN, PSBGEN, and ACBGEN have been successfully executed for these DBDs and PSBs.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0027E Invalid POINTER parameter on SEGM *segmentname* of DBD *dbdname* (″javaclass.method″) (DHB0027E)

Explanation: The POINTER parameter on the SEGM statement is invalid.

System Action: Processing terminates.

Programmer Response: Verify that the PSB and DBDs are valid. Ensure that DBDGEN, PSBGEN, and ACBGEN have been successfully executed for these DBDs and PSBs.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0030E Target DBD *dbdname* of Index DBD *dbdname* Not found (″javaclass.method″) (DHB0030E)

Explanation: The target DBD referenced by an index DBD could not be located.

Programmer Response: Ensure that all DBDs are in the source directory. Verify that DBDGEN, PSBGEN, and ACBGEN have been successfully executed for these DBDs and PSBs.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0031E Target DBD *dbdname* of Primary Index DBD *dbdname* Not HIDAM (″javaclass.method″) (DHB0031E)

Explanation: The target DBD of a HIDAM index is not type HIDAM.

System Action: Processing terminates.

Programmer Response: Verify that the PSB and DBDs are valid. Ensure that DBDGEN, PSBGEN, and ACBGEN have been successfully executed for these DBDs and PSBs.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0032E Target DBD *dbdname* of Primary Index DBD *dbdname* Not HIDAM. (″javaclass.method″) (DHB0032E)

Explanation: The primary index database is not HIDAM.

Programmer Response: Verify that the PSB and DBDs are valid. Ensure that DBDGEN, PSBGEN, and ACBGEN have been successfully executed for these DBDs and PSBs.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0033E Index *dbdname* target segment segment in DBD *dbdname* is not a physical segment. (″javaclass.method″) (DHB0033E)

Explanation: There is a problem in the definition of the primary index.

System Action: Processing terminates.

Programmer Response: Verify that the PSB and DBDs are valid. Ensure that DBDGEN, PSBGEN, and ACBGEN have been successfully executed for these DBDs and PSBs.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0034E Primary index *dbdname* target segment *segmentname* in DBD *dbdname* is not a root segment. (″javaclass.method″) (DHB0034E)

Explanation: There is a problem in the definition of the primary index.

System Action: Processing terminates.

Programmer Response: Verify that the PSB and DBDs are valid. Ensure that DBDGEN, PSBGEN, and ACBGEN have been successfully executed for these DBDs and PSBs.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0035E Index *dbdname* target field *fieldname* in segment *segmentname* in DBD *dbdname* not found. ("javaclass.method") (DHB0035E)

Explanation: There is a problem in the definition of the primary index.

System Action: Processing terminates.

Programmer Response: Verify that the PSB and DBDs are valid. Ensure that DBDGEN, PSBGEN, and ACBGEN have been successfully executed for these DBDs and PSBs.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0036E Primary index *dbdname* target field *fieldname* in segment *segmentname* in DBD *dbdname* not a sequence field. ("javaclass.method") (DHB0036E)

Explanation: There is a problem in the definition of the primary index.

System Action: Processing terminates.

Programmer Response: Verify that the PSB and DBDs are valid. Ensure that DBDGEN, PSBGEN, and ACBGEN have been successfully executed for these DBDs and PSBs.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0037E Non-partitioned index *dbdname* does not match partitioned main DBD *dbdname*. ("javaclass.method") (DHB0037E)

Explanation: There is a problem in the definition of the primary index.

System Action: Processing terminates.

Programmer Response: Verify that the PSB and DBDs are valid. Ensure that DBDGEN, PSBGEN, and ACBGEN have been successfully executed for these DBDs and PSBs

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0038E Partitioned index *dbdname* does not match non-partitioned main DBD *dbdname*. ("javaclass.method") (DHB0038E)

Explanation: There is a problem in the definition of the primary index.

System Action: Processing terminates.

Programmer Response: Verify that the PSB and DBDs are valid. Ensure that DBDGEN, PSBGEN, and ACBGEN have been successfully executed for these DBDs and PSBs.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0039E DBD *dbdname* is invalid type for virtual logical child *segmentname*. ("javaclass.method") (DHB0039E)

Explanation: There is a problem with the DBD definition of a virtual logical child.

System Action: Processing terminates.

Programmer Response: Verify that the PSB and DBDs are valid. Ensure that DBDGEN, PSBGEN, and ACBGEN have been successfully executed for these DBDs and PSBs.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0040E Invalid SOURCE parameter in virtual logical child segment *segmentname* of DBD *dbdname*. ("javaclass.method") (DHB0040E)

Explanation: There is a problem with the DBD definition of a virtual logical child.

System Action: Processing terminates.

Programmer Response: Verify that the PSB and DBDs are valid. Ensure that DBDGEN, PSBGEN, and ACBGEN have been successfully executed for these DBDs and PSBs.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0042E Virtual logical child segment *segmentname* source DBD *dbdname* could not be created. ("javaclass.method") (DHB0042E)

Explanation: There is a problem with the DBD definition of a virtual logical child.

System Action: Processing terminates.

Programmer Response: Verify that the PSB and DBDs are valid. Ensure that DBDGEN, PSBGEN, and

ACBGEN have been successfully executed for these DBDs and PSBs.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0043E Source segment *segmentname* of Virtual logical child *childname* not found in source DBD *dbdname*. ("javaclass.method") (DHB0043E)

Explanation: There is a problem with the DBD definition of a virtual logical child.

System Action: Processing terminates.

Programmer Response: Verify that the PSB and DBDs are valid. Ensure that DBDGEN, PSBGEN, and ACBGEN have been successfully executed for these DBDs and PSBs.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0044E Source segment *segmentname* of Virtual logical child *segmentname* in source DBD *dbdname* is not a physical segment ("javaclass.method") (DHB0044E)

Explanation: There is a problem with the DBD definition of a virtual logical child.

System Action: Processing terminates.

Programmer Response: Verify that the PSB and DBDs are valid. Ensure that DBDGEN, PSBGEN, and ACBGEN have been successfully executed for these DBDs and PSBs.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0045E DBD for Senseg *segmentname* in PSB *psbname* not found ("javaclass.method") (DHB0045E)

Explanation: There is a problem with the PSB definition of a sensitive segment.

System Action: Processing terminates.

Programmer Response: Verify that the PSB and DBDs are valid. Ensure that DBDGEN, PSBGEN, and ACBGEN have been successfully executed for these DBDs and PSBs.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0046E Segment for Senseg *segmentname* in PSB *PSBname* not found. ("javaclass.method") (DHB0046E)

Explanation: There is a problem with the PSB definition of a sensitive segment.

System Action: Processing terminates.

Programmer Response: Verify that the PSB and DBDs are valid. Ensure that DBDGEN, PSBGEN, and ACBGEN have been successfully executed for these DBDs and PSBs.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0047E Parent for Senseg *segmentname* in PSB *psbname* not found. ("javaclass.method") (DHB0047E)

Explanation: There is a problem with the PSB definition of a sensitive segment.

System Action: Processing terminates.

Programmer Response: Verify that the PSB and DBDs are valid. Ensure that DBDGEN, PSBGEN, and ACBGEN have been successfully executed for these DBDs and PSBs.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0048E Real segment for senseg, *segmentname*, owner of senfld *fieldname* in stmnt set *psbname* not found. ("javaclass.method") (DHB0048E)"},

Explanation: There is a problem with the PSB definition of a sensitive segment.

System Action: Processing terminates.

Programmer Response: Verify that the PSB and DBDs are valid. Ensure that DBDGEN, PSBGEN, and ACBGEN have been successfully executed for these DBDs and PSBs.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0049E Real field for senfld *fieldname* in senseg *segmentname* in stmnt set *psbname* not found (*number*). ("javaclass.method") (DHB0049E)

Explanation: There is a problem with the PSB definition of a sensitive segment.

System Action: Processing terminates.

Programmer Response: Verify that the PSB and DBDs are valid. Ensure that DBDGEN, PSBGEN, and

ACBGEN have been successfully executed for these DBDs and PSBs.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0051E Name parameter missing in field of segment *segmentname* **in stmnt set** *dbdname* **("javaclass.method") (DHB0051E)**

Explanation: There is a problem with a DBD definition.

System Action: Processing terminates.

Programmer Response: Verify that the PSB and DBDs are valid. Ensure that DBDGEN, PSBGEN, and ACBGEN have been successfully executed for these DBDs and PSBs.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0052E Output file *filename* **can not be opened ("javaclass.method") (DHB0052E),**

Explanation: The named output file cannot be opened.

System Action: Processing terminates.

Programmer Response: Determine the reason that the file cannot be opened and correct it.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0053E Output file *filename* **IO Exception. ("javaclass.method") (DHB0053E),**

Explanation: There was an I/O error while the named output file was being opened.

System Action: Processing terminates.

Programmer Response: Determine the reason that the file cannot be opened and correct it.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0054E Invalid parenthesis structure in parameter: *parameter* **(***number***). ("javaclass.method") (DHB0054E),**

Explanation: There was an error in the parameter specified. There was an inconsistency in the parentheses.

System Action: Processing terminates.

Programmer Response: Review the indicated parameter and correct the error.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0055E ("PARAM_TOOMAN_PAREN", "Parenthesis more than 2 deep in parameter: *parameter* **("javaclass.method") ((DHB0055E)**

Explanation: There was an error in the parameter specified. There were too many parenthesis specified in the parameter.

System Action: Processing terminates.

Programmer Response: Review the indicated parameter and correct the error.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0056E Parameter *parameter* **value** *value* **can not be parsed . ("javaclass.method") (DHB0056E)**

Explanation: There was an error in the parameter specified. The program was unable to find the value for the parameter.

System Action: Processing terminates.

Programmer Response: Review the indicated parameter and correct the error.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0057E In parameter *parameter* **subparam** *subparameter* **and token** *token* **evaluates to null. ("javaclass.method") (DHB0057E),**

Explanation: There was an error in the parameter specified. There was a missing or invalid subparameter.

System Action: Processing terminates.

Programmer Response: Review the indicated parameter and correct the error.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0058E Expected continuation line not found for statement *statementnumber* **("javaclass.method") (DHB0058E)**

Explanation: Expected continuation line was not found in the control statement input. The previous line had a continuation character in column 72.

System Action: Processing terminates.

Programmer Response: Check the control statement input and correct the problem

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0059E ″Continuation line format error in statement *statementnumber* (″javaclass.method″) (DHB0059E)

Explanation: Expected continuation line was not found in the control statement input. There was a format error in the expected continuation line.

System Action: Processing terminates.

Programmer Response: Check the control statement input and correct the problem.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

DHB0061E Input file *filename* could not be opened. (″javaclass.method″) (DHB0061E)

Explanation: Input file could not be opened.

System Action: Processing terminates abnormally.

Programmer Response: Check to see if there are any other error messages issued for the open failure.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

DHB0062E Input file *filename* IO Exception. (″javaclass.method″) (DHB0062E)

Explanation: There was an I/O error while the input file can was being opened.

System Action: Processing terminates.

Programmer Response: Determine the reason that the file cannot be opened and correct it.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

DHB0063E Field statement *fieldname* in segment *segmentname* not found in statement set (″javaclass.method″) (DHB0063E),

Explanation: The expected field was missing from the DBD.

Programmer Response: Ensure that the input PSB and DBD source is valid. Verify that PSBGEN, DBDGEN, and ACBGEN have been successfully executed for this DBD and PSB.

Problem Determination: 2,3 ,8,17d and dlimodeltrace output.

DHB0065E No LCHILD found in index DBD *dbdname* (″javaclass.method″) (DHB0065E)

Explanation: The index DBD relationship is not correct.

System Action: Processing terminates.

Programmer Response: Ensure that the input PSB and DBD source is valid. Verify that PSBGEN, DBDGEN, and ACBGEN have been successfully executed for this DBD and PSB.

Problem Determination: 2,3 ,8,17d and dlimodeltrace output.

DHB0066E Target DBD *dbdname* not found for index DBD *dbdname*. (″javaclass.method″) (DHB0066E)

Explanation: The index DBD relationship is not correct.

System Action: Processing terminates.

Programmer Response: Ensure that the input PSB and DBD source is valid. Verify that PSBGEN, DBDGEN, and ACBGEN have been successfully executed for this DBD and PSB.

Problem Determination: 2,3 ,8,17d and dlimodeltrace output.

DHB0067E Target seg *segmentname* for index DBD *dbdname* not found in DBD *dbdname*. (″javaclass.method″) (DHB0067E)

Explanation: The index DBD relationship is not correct.

System Action: Processing terminates.

Programmer Response: Ensure that the input PSB and DBD source is valid. Verify that PSBGEN, DBDGEN, and ACBGEN have been successfully executed for this DBD and PSB.

Problem Determination: 2,3 ,8,17d and dlimodeltrace output.

DHB0068E Target seg *segmentname* for index DBD *dbdname* in DBD *dbdname* is not a physical segment. (″javaclass.method″) (DHB0068E)

Explanation: The index DBD relationship is not correct.

System Action: Processing terminates.

Programmer Response: Ensure that the input PSB and DBD source is valid. Verify that PSBGEN, DBDGEN, and ACBGEN have been successfully executed for this DBD and PSB.

Problem Determination: 2,3 ,8,17d and dlimodeltrace output.

DHB0069E Target DBD *dbdname* for primary index DBD *dbdname* is not HIDAM. ("javaclass.method") (DHB0069E)

Explanation: The index DBD relationship is not correct.

System Action: Processing terminates.

Programmer Response: Ensure that the input PSB and DBD source is valid. Verify that PSBGEN, DBDGEN, and ACBGEN have been successfully executed for this DBD and PSB.

Problem Determination: 2,3 ,8,17d and dlimodeltrace output.

DHB0070E Target field *fieldname* in target DBD *dbdname* for primary index DBD *dbdname* is not HIDAM. ("javaclass.method") (DHB0070E)

Explanation: The index DBD relationship is not correct.

System Action: Processing terminates.

Programmer Response: Ensure that the input PSB and DBD source is valid. Verify that PSBGEN, DBDGEN, and ACBGEN have been successfully executed for this DBD and PSB.

Problem Determination: 2,3 ,8,17d and dlimodeltrace output.

DHB0071E Invalid SOURCE parameter on logical segment *segmentname* in DBD *dbdname* *ordinalnumber* subparm) ("javaclass.method") (DHB0071E)

Explanation: The logical relationship is not correct.

System Action: Processing terminates.

Programmer Response: Ensure that the input PSB and DBD source is valid. Verify that PSBGEN, DBDGEN, and ACBGEN have been successfully executed for this DBD and PSB.

Problem Determination: 2,3 ,8,17d and dlimodeltrace output.

DHB0072E *ordinalnumber* SOURCE segment *segmentname* of logical segment *segmentname* in DBD *dbdname* could not be found in the source DBD ("javaclass.method") (DHB0072E)

Explanation: The logical relationship is not correct.

System Action: Processing terminates.

Programmer Response: Ensure that the input PSB and DBD source is valid. Verify that PSBGEN, DBDGEN, and ACBGEN have been successfully executed for this DBD and PSB.

Problem Determination: 2,3 ,8,17d and dlimodeltrace output.

DHB0073E *ordinalnumber* SOURCE segment *segmentname* of logical segment *segmentname* in DBD *dbdname* is not a physical or a VLC segment ("javaclass.method") (DHB0073E)

Explanation: The logical relationship is not correct.

System Action: Processing terminates.

Programmer Response: Ensure that the input PSB and DBD source is valid. Verify that PSBGEN, DBDGEN, and ACBGEN have been successfully executed for this DBD and PSB.

Problem Determination: 2,3 ,8,17d and dlimodeltrace output.

DHB0074E *ordinalnumber* SOURCE segment *segmentname* of logical segment *segmentname* in DBD *dbdname* is not a physical segment ("javaclass.method") (DHB0074E)

Explanation: The logical relationship is not correct.

System Action: Processing terminates.

Programmer Response: Ensure that the input PSB and DBD source is valid. Verify that PSBGEN, DBDGEN, and ACBGEN have been successfully executed for this DBD and PSB.

Problem Determination: 2,3 ,8,17d and dlimodeltrace output.

DHB0075E XFLD statement *xdfldname* in segment *segmentname* not found in statement set ("javaclass.method") (DHB0075E)

Explanation: The logical relationship is not correct.

System Action: Processing terminates.

Programmer Response: Ensure that the input PSB and DBD source is valid. Verify that PSBGEN, DBDGEN, and ACBGEN have been successfully executed for this DBD and PSB.

Problem Determination: 2,3 ,8,17d and dlimodeltrace output.

DHB0076E XFLD statement in segment *segmentname* DBD *segmentname* , source segment *segmentname* not found. ("javaclass.method") (DHB0076E)

Explanation: The logical relationship is not correct.

System Action: Processing terminates.

Programmer Response: Ensure that the input PSB

and DBD source is valid. Verify that PSBGEN, DBDGEN, and ACBGEN have been successfully executed for this DBD and PSB.

Problem Determination: 2,3 ,8,17d and dlimodeltrace output.

DHB0077E XFLD statement in segment *segmentname* DBD *dbdname*. Invalid *parametername* parameter. ("javaclass.method") (DHB0077E)

Explanation: The logical relationship is not correct.

System Action: Processing terminates.

Programmer Response: Ensure that the input PSB and DBD source is valid. Verify that PSBGEN, DBDGEN, and ACBGEN have been successfully executed for this DBD and PSB.

Problem Determination: 2,3 ,8,17d and dlimodeltrace output.

DHB0078E XFLD statement in segment *segmentname* DBD *dbdname*. Too many *fieldtypename* fields. ("javaclass.method") (DHB0078E)

Explanation: The logical relationship is not correct.

System Action: Processing terminates.

Programmer Response: Ensure that the input PSB and DBD source is valid. Verify that PSBGEN, DBDGEN, and ACBGEN have been successfully executed for this DBD and PSB.

Problem Determination: 2,3 ,8,17d and dlimodeltrace output.

DHB0079E XFLD statement in segment *segmentname*, DBD *dbdname*, *fieldtypename* field *subparametername* not found. ("javaclass.method") (DHB0079E)

Explanation: The logical relationship is not correct.

System Action: Processing terminates.

Programmer Response: Ensure that the input PSB and DBD source is valid. Verify that PSBGEN, DBDGEN, and ACBGEN have been successfully executed for this DBD and PSB.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0080E Logical segment *segmentname* has both a physical and a logical LC ("javaclass.method") (DHB0080E)

Explanation: The logical relationship is not correct.

System Action: Processing terminates.

Programmer Response: Ensure that the input PSB and DBD source is valid. Verify that PSBGEN, DBDGEN, and ACBGEN have been successfully executed for this DBD and PSB.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0081E No search fields found for secondary PROCSEQ DBD for PCB *pcbname* ("javaclass.method") . (DHB0081E)

Explanation: The logical relationship is not correct.

System Action: Processing terminates.

Programmer Response: Ensure that the input PSB and DBD source is valid. Verify that PSBGEN, DBDGEN, and ACBGEN have been successfully executed for this DBD and PSB.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0082E No source segment found for search fields of secondary PROCSEQ of PCB *pcbname* ("javaclass.method") (DHB0082E)

Explanation: The logical relationship is not correct.

System Action: Processing terminates.

Programmer Response: Ensure that the input PSB and DBD source is valid. Verify that PSBGEN, DBDGEN, and ACBGEN have been successfully executed for this DBD and PSB.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0083E PSB *psbname* has no database PCBs ("javaclass.method") (DHB0083E)

Explanation: The named PSB has no database PCBs defined.

System Action: Processing terminates.

Programmer Response: Ensure that the input PSB is valid. Verify that PSBGEN and ACBGEN have been successfully executed for this PSB.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0084E Invalid DBD type named for secondary PROCSEQ DBD in PCB *pcbname* of PSB *psbname* ("javaclass.method") (DHB0084E)

Explanation: The DBD file is invalid.

System Action: Processing terminates.

Programmer Response: Verify that the DBD source

file is valid. Ensure that DBDGEN, PSBGEN and ACBGEN have been successfully executed for these DBDs and PSBs.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0085E Segment not found in secondary PROCSEQ DBD for PCB *pcbname* of PSB *psbname* (″javaclass.method″) (DHB0085E)

Explanation: The DBD file is invalid.

System Action: Processing terminates.

Programmer Response: Verify that the DBD source file is valid and that all related DBDs are available. Ensure that DBDGEN, PSBGEN, and ACBGEN have been successfully run for these DBDs and PSBs.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0086E No XDFLD found for secondary PROCSEQ DBD for PCB *pcbname* of PSB *psbname* (″javaclass.method″) (DHB0086E)

Explanation: The DBD file is invalid.

System Action: Processing terminates.

Programmer Response: Verify that the DBD source file is valid and that all related DBDs are available. Ensure that DBDGEN, PSBGEN, and ACBGEN have been successfully executed for these DBDs and PSBs.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0087E No search fields found for secondary PROCSEQ DBD for PCB *pcbname* of PSB *psbname* (″javaclass.method″) (DHB0087E)

Explanation: The DBD file is invalid.

System Action: Processing terminates.

Programmer Response: Verify that the DBD source file is valid and that all related DBDs are available. Ensure that DBDGEN, PSBGEN, and ACBGEN have been successfully executed for these DBDs and PSBs.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0088E DD1 parm missing from Dataset statement in DBD *dbdname* (″javaclass.method″) (DHB0088E)

Explanation: The DBD file is invalid.

System Action: Processing terminates.

Programmer Response: Verify that the DBD source file is valid. Ensure that DBDGEN, PSBGEN, and ACBGEN have been successfully executed for these DBDs and PSBs.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0089E OVFLW parm missing from Dataset statement in DBD *dbdname* (″javaclass.method″) (DHB0089E)

Explanation: The DBD file is invalid.

System Action: Processing terminates.

Programmer Response: Verify that the DBD source file is valid. Ensure that DBDGEN, PSBGEN, and ACBGEN have been successfully executed for these DBDs and PSBs.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0090E RECFM missing from Dataset statement in DBD *dbdname* (″javaclass.method″) (DHB0090E)

Explanation: The DBD file is invalid.

System Action: Processing terminates.

Programmer Response: Verify that the DBD source file is valid. Ensure that DBDGEN, PSBGEN, and ACBGEN have been successfully executed for these DBDs and PSBs.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0200W Unsupported HSAM DBD: *dbdname* ignored (DHB0200W)

Explanation: HSAM DBDs are not supported.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0201W Unsupported MSDB DBD: *dbdname* ignored (DHB0201W)

Explanation: MSDB DBDs are not supported.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0202W Unsupported GSAM DBD: *dbdname* ignored (DHB0202W)

Explanation: GSAM DBDs are not supported.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0203W Unnamed PCB: *pcbname* encountered in DBD *dbdname* (DHB0203W)

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

DHB0204W Unsupported processing option 'K' ignored from Segment: *segmentname* in PCB: *pcbname* (DHB0204W)

Explanation: PROCOPT=K is not supported.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

DHB0205W Required type qualifier missing from field: *fieldname* of type *fieldtype* (DHB0205W)

Explanation: The type qualifier is missing from the FIELD statement in the input control statement data set.

Programmer Response: Correct the control statement.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

DHB0206W Invalid pointer options were ignored in DBD: *dbdname* SEGMENT: *segmentame* (DHB0206W)"},

Explanation: The DBD had some invalid pointer options. They were ignored.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

DHB0207W Duplicate PSB: *psbname* was ignored (DHB0207W)

Explanation: Duplicate PSB has been ignored in the input control statements.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

DHB0208W A Field with no identifying name was detected (DHB0208W)

Explanation: A FIELD statement in the input control statements was ignored because it has no name.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

DHB0500E No Control Statements were passed into the DLIModel

Explanation: No arguments were passed into the DLIModel utility. The path to the control statements file must be the first argument passed in.

Programmer Response: Make sure the path to the control statements is passed in as the first argument in the invocation of the DLIModel utility.

Module: DLIModel utility.

DHB0501E *xxx* is an invalid file type

Explanation: The second argument passed into the DLIModel utility must be either "HFS" or "PDS" (HFS is the default if no second argument is passed in.

Programmer Response: Make sure the second parameter is either "HFS" or "PDS."

Module: DLIModel utility.

DHB0502W DBD: *xxx* referenced by Segment: *xxx* was not found within Physical DBDs. Segment ignored

Explanation: A Segment referenced a DBD that could not be found. The Segment definition in the control statements will be ignored.

Programmer Response: Check the spelling and existence of the referenced DBD.

Module: DLIModel utility.

DHB0503W Segment: *xxx* not found in DBD: *xxx*. Segment ignored

Explanation: The Segment could not be found in the DBD referenced in the control statements.

Programmer Response: Check the spelling of the segment, and make sure it exists in the listed DBD.

Module: DLIModel utility.

DHB0504W Fields cannot be defined in non-physical Segment: *xxx* of DBD: *xxx*. Define corresponding Physical Segment Fields instead. All Field definitions ignored

Explanation: You can only define the fields in the physical segment. Logical Segments inherit field information from their corresponding physical segment.

Programmer Response: Define the field information on the physical segment.

Module: DLIModel utility.

DHB0505W Start Bytes Do Not Match in Field: *xxx* in Segment: *xxx*. Field redefine ignored

Explanation: Start and Length cannot be changed on a DBD defined field.

Programmer Response: Use a different field name, so that it does not conflict, and attempt to redefine the DBD-defined field, or make sure the start and length match.

Module: DLIModel utility.

DHB0506W Field Lengths Do Not Match in Field: *xxx* in Segment: *xxx*. Field redefine ignored

Explanation: Start and Length cannot be changed on a DBD-defined field.

Programmer Response: Use a different field name, so that it does not conflict, and attempt to redefine the DBD-defined field, or make sure the start and length match.

Module: DLIModel utility.

DHB0507E Failure parsing PSB: *xxx*

Explanation: General exception produced catching an unexpected exception during parsing of the PSB.

Programmer Response: Examine the trace output and contact the IBM Support Center.

Module: DLIModel utility.

DHB0508E OVERFLOW/SIDESEG Segment *xxx* is not a valid segment.

Explanation: A segment was listed as an overflow or side segment that does not exist.

Programmer Response: Check the spelling and make sure that the segment does exist and that it is an immediate child of the segment defining the overflow or side segment.

Module: DLIModel utility.

DHB0509W OVERFLOW Segment *xxx* is not a SENSEG for PCB *xxx*.

Explanation: The segment label that is to be used as the overflow segment is not sensitive for the PCB it is being defined for.

Programmer Response: You cannot use this segment as an overflow segment unless the segment is made sensitive.

Module: DLIModel utility.

DHB0510W SIDESEGMENT *xxx* is not a SENSEG for PCB *xxx*.

Explanation: The segment label to be used as a side segment is not sensitive for the PCB that it is being defined for.

Programmer Response: You cannot use this segment as a side segment unless the segment is made sensitive.

Module: DLIModel utility.

DHB0511W PCB *xxx* SIDESEGMENT *xxx* KEYFIELD *xxx* is not a valid FIELD.

Explanation: The specified KEYFIELD is not listed in the DBD as a valid field.

Programmer Response: Check the spelling of the KEYFIELD and make sure it exists in the listed side segment.

Module: DLIModel utility.

DHB0512W PCB *xxx*, Seg *xxx* Key Field *xxx* is a key field and specified as ″XMLType=none″; Verify that all key data fields are contained in schema.

Explanation: If the XML schema has been requested as `store`, all the key fields must be present in the schema. One of the key fields has been specified as `XMLType=none`.

Programmer Response: Either include the key field listed in the XML schema or request a read-only, XML schema type `retrieve`.

Module: DLIModel utility.

DHB0520E DBD: *xxx*: GenXMLSchema=store not allowed when when ACCESS is *xxx*

Explanation: If the XML schema type is requested as `store`, the DBD ACCESS level cannot be PSINDEX or INDEX.

Programmer Response: Change the XML schema option to `retrieve`.

Module: DLIModel utility.

DHB0521E ″PCB″ *xxx*, Segment *xxx* has PROCOPT=K; not allowed for genXMLSchema=store

Explanation: XML schema type `store` is not allowed for PROCOPT=K.

Programmer Response: Change the XML schema option to `retrieve`.

Module: DLIModel utility.

DHB0522E PCB *xxx*, Secondary index sequence not allowed for genXMLSchema=store

Explanation: XML schema type `store` cannot be specified if a secondary processing sequence for this PCB exists.

Programmer Response: Change the XML schema option to `retrieve`.

Module: DLIModel utility.

DHB0523E PCB *xxx*, Logical child segment *xxx* not allowed for genXMLSchema=store

Explanation: No logical relationship can exist in the PCB if the XML schema type has been requested as `store`.

Programmer Response: Change the XML schema option to `retrieve`.

Module: DLIModel utility.

DHB0541E *xxx* is not a valid Data Set

Explanation: The specified name, listed in the control statements file, is not a valid PDS or HFS path.

Programmer Response: Make sure the specified PDS or HFS path exists and is readable by the application.

Module: DLIModel utility.

DHB0542E OPTIONS must be specified

Explanation: An OPTIONS tag must be listed in the control statements file.

Programmer Response: Add an OPTIONS selection.

Module: DLIModel utility.

DHB0543E OPTIONS can only be specified in the main controlStatments File

Explanation: The OPTIONS tag must appear only in the main control statements file and cannot appear in an included file.

Programmer Response: Remove the OPTIONS section from the included file.

Module: DLIModel utility.

DHB0544E *xxx* parameter must be specified in the *xxx* statement at line: *xxx*

Explanation: A required parameter is missing in the control statements file for a particular statement.

Programmer Response: For the required missing parameter, consult *IMS Version 9: IMS Java Guide and Reference*.

Module: DLIModel utility.

DHB0545E *xxx* parameter was specified twice in the *xxx* statement at line: *xxx*

Explanation: A parameter was specified again after having already been defined.

Programmer Response: Remove the duplicate parameter and rerun.

Module: DLIModel utility.

DHB0546E *xxx* parameter should not be specified in the *xxx* statement at line: *xxx*

Explanation: An illegal parameter is being used in a control statement.

Programmer Response: Remove the illegal parameter and consult the *IMS Version 9: IMS Java Guide and Reference* for the allowed parameters.

Module: DLIModel utility.

DHB0547E Default Value: *xxx* is invalid for type: *xxx* in *xxx* statement at line: *xxx*

Explanation: An illegal default value was specified.

Programmer Response: For the valid default values for each type, consult *IMS Version 9: IMS Java Guide and Reference*.

Module: DLIModel utility.

DHB0548E Field *xxx* already redefined for Segment *xxx*. Cannot be redefined twice at line: *xxx*

Explanation: A field has been redefined twice.

Programmer Response: Remove the duplicate field redefinition and rerun the utility.

Module: DLIModel utility.

DHB0549E Duplicate JavaName *xxx* specified for two fields in Segment *xxx* at line: *xxx*

Explanation: The same JavaName for a field definition is being used multiple times within the same segment definition.

Programmer Response: Remove or rename any duplicate JavaName definitions among fields in the same segment.

Module: DLIModel utility.

DHB0550E Segment *xxx* in DBD *xxx* already defined. Cannot be defined twice at line: *xxx*

Explanation: A segment has been defined more than once in the same DBD.

Programmer Response: Remove the duplicate segment definition and rerun the utility.

Module: DLIModel utility.

DHB0551E Duplicate JavaName *xxx* specified for Segment *xxx* in DBD *xxx* at line: *xxx*

Explanation: The same JavaName for a segment definition is being used multiple times within the same DBD definition.

Programmer Response: Remove or rename any duplicate JavaName definitions among segments within the same DBD.

Module: DLIModel utility.

DHB0552E GenXMLSchemas must not be specified, at line: *xxx* unless Option GenJavaSource was previously specified

Explanation: The GenXMLSchemas option cannot be used unless the GenJavaSource option is also enabled.

Programmer Response: Set `GenJavaSource=YES` and rerun the utility.

Module: DLIModel utility.

DHB0553E XMLStorageType INTACT must not be specified at line: *xxx* when XMLType Attribute/NONE is also specified

Explanation: `XMLStorageType=INTACT` can only be specified when XMLType is set to `element`.

Programmer Response: Either remove the INTACT storage tag or set `XMLType=element` and rerun the utility.

Module: DLIModel utility.

DHB0563W PCB *xxx* does not exist in PSB *xxx* and was ignored

Explanation: A PCB was specified that was not present in the PSB source. The PCB definition will be ignored.

Programmer Response: Check the PCB spelling and either correct or remove the PCB definition.

Module: DLIModel utility.

DHB0564W *xxx* was not recognized as a valid PSB and was ignored

Explanation: The PSB specified in the PSB control statement could not be found and parsed.

Programmer Response: Check the PSB spelling and either correct or remove the PSB target.

Module: DLIModel utility.

DHB0565I Field: *xxx* in Segment: *xxx* defaulted to type: *xxx*

Explanation: Since no type was specified for the referenced field, it was automatically defined as the listed type.

Programmer Response: Specify a type in the referenced field control statement.

Module: DLIModel utility.

DHB0566I Field: *xxx* defined in the original DBD of Segment: *xxx* was not redefined in control statements, left as default

Explanation: No control statement for the referenced field is defined. The field will take all default values.

Programmer Response: Define the field in the control statement file.

Module: DLIModel utility.

DHB0567I XField: *xxx* defined in the original DBD of Segment: *xxx* was not redefined in control statements, left as default

Explanation: No control statement for the referenced secondary index field is defined. The field will take all default values.

Programmer Response: Define the secondary index field as an XFIELD in the control statement file.

Module: DLIModel utility.

DHB0568I Redefined Secondary Index *xxx* does not exist in DBD definition of Segment: *xxx*. Redefine ignored

Explanation: A secondary index was defined in the control statements file but was not found in the DBD.

Programmer Response: Check the spelling of the secondary index field or remove the non-existent secondary index field definition.

Module: DLIModel utility.

DHB0569I Dataset: *xxx* was not found and ignored

Explanation: The listed data set could not be found.

Programmer Response: Make sure the listed data set is correctly spelled, exists, and is available to the utility.

Module: DLIModel utility.

DHB0570W Field: *xxx* of Segment: *xxx* has a start byte of *xxx*, less than the minimum value of 1.

Explanation: The field listed in the control statement must not have a length less than 1.

Programmer Response: Double check the field length and correct the control statement.

Module: DLIModel utility.

DHB0571W Field: *xxx* exceeds maximum length of *xxx* for Segment: *xxx* and was ignored

Explanation: The field listed in the control statement must fit into the segment containing it.

Programmer Response: Double check the field length and correct the control statement.

Module: DLIModel utility.

DHB0572W The Alias Name: *xxx* is already being used by another PCB within the same PSB

Explanation: Each PCB in a PSB must have a unique PCB alias name.

Programmer Response: Make sure each PCB within a PSB has a unique PCB alias name.

Module: DLIModel utility.

DHB0576W The Alias Name: *xxx* is already being used by another Field within the same Segment

Explanation: Each field in a segment must have a unique field alias name.

Programmer Response: Make sure each field within a segment has a unique field alias name.

Module: DLIModel utility.

DHB0577W The Alias Name: *xxx* was invalid and has been redefined to: *xxx*

Explanation: The alias name listed in the control statement was invalid and has been automatically renamed.

Programmer Response: Consult *IMS Version 9: IMS Java Guide and Reference* for the list of reserved names, and change the alias name to a valid name.

Module: DLIModel utility.

DHB0578W The Alias Name: xxx is a reserved SQL keyword and cannot be used.

Explanation: The alias name is a reserved SQL keyword.

Programmer Response: Consult *IMS Version 9: IMS Java Guide and Reference* for the list of reserved names, and change the alias name to a valid name.

Module: DLIModel utility.

DHB0580W JavaName cannot be set to NULL.

Explanation: The alias name must not be set to NULL.

Programmer Response: Consult *IMS Version 9: IMS Java Guide and Reference* for the list of reserved names, and change the alias name to a valid name.

Module: DLIModel utility.

DHB0800E System error: *various*

Explanation: This is an internal error.

System Action: Processing terminates abnormally.

Programmer Response: Contact the IBM Support Center.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

DHB0801E Logical segment *segmentname* has both a physical and a logical LC ("javaclass.method") (DHB0801E)

Explanation: This is an internal error.

System Action: Processing terminates abnormally.

Programmer Response: Contact the IBM Support Center.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

DHB0802E No search fields found for secondary PROCSEQ dbd for PCB *pcbname* ("javaclass.method") (DHB0802E),

Explanation: The DBD file is invalid.

System Action: Processing terminates.

Programmer Response: Verify that the DBD source file is valid. Ensure that DBDGEN, PSBGEN, and ACBGEN have been successfully run for these DBDs and PSBs.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

DHB0803E No source segment found for search fields of secondary PROCSEQ of PCB *pcbname* ("javaclass.method") (DHB0803E)

Explanation: The DBD file is invalid.

System Action: Processing terminates.

Programmer Response: Verify that the DBD source file is valid. Ensure that DBDGEN, PSBGEN, and ACBGEN have been successfully run for these DBDs and PSBs.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0804E PSB *psbname* has no PCBs (″javaclass.method″) (DHB0804E)″},

Explanation: The PSB file contains no PCBs.

System Action: Processing terminates.

Programmer Response: Verify that the PSB source file is correct. Ensure that PSBGEN and ACBGEN have been successfully run for this PSB.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0805E Invalid db type named for secondary PROCSEQ dbd in PCB *pcbname* of PSB *psbname* (″javaclass.method″) (DHB0805E),

Explanation: The PSB or DBD file is invalid.

System Action: Processing terminates.

Programmer Response: Verify that the DBD and PSB source files are valid. Ensure that DBDGEN, PSBGEN, and ACBGEN have been successfully run for these DBDs and PSBs.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0806E Segment not found in secondary PROCSEQ DBD for PCB *pcbname* of PSB *psbname* (″javaclass.method″) (DHB0806E)

Explanation: The PSB or DBD file is invalid.

System Action: Processing terminates.

Programmer Response: Verify that the DBD and PSB source files are valid. Ensure that DBDGEN, PSBGEN, and ACBGEN have been successfully run for these DBDs and PSBs.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0807E No XDFLD found for secondary PROCSEQ DBD for PCB *pcbname* of PSB *psbname* (″javaclass.method″) (DHB0807E)

Explanation: The PSB or DBD file is invalid.

System Action: Processing terminates.

Programmer Response: Verify that the DBD and PSB source files are valid. Ensure that DBDGEN, PSBGEN and ACBGEN have been successfully run for these DBDs and PSBs.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

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DHB0808E No search fields found for secondary PROCSEQ dbd for PCB *pcbname* of PSB *psbname* (″javaclass.method″) (DHB0808E)

Explanation: The PSB or DBD file is invalid.

System Action: Processing terminates.

Programmer Response: Verify that the DBD and PSB source files are valid. Ensure that DBDGEN, PSBGEN, and ACBGEN have been successfully run for these DBDs and PSBs.

Problem Determination: 2, 3, 8, 17d, and dlimodeltrace output

Chapter 11. DSP (DBRC) Messages

In this section:

- "Introduction"
- "Database Recovery Control Messages (DSPxxxx)"
  - "DBRC Request Return Codes" on page 392
  - "Error Conditions for Message DSP0266I" on page 408
- "HALDB Partition Definition Utility Messages (DSPMxxx)" on page 409

Introduction

This section describes the messages and return codes from Database Recovery Control (DBRC) and HALDB Partition Definition utility.

All messages generated by DBRC are sent to the SYSPRINT data set that is defined for the job step for which the message is generated. (If a SYSPRINT data set is not available, Write-to-Operator (WTO) messages are issued.)

Information for each message includes the following:

Explanation: What the message means, why it appears, its cause, and what its variable fields represent.

System Action: What happened as a result of the condition that generated the message.

Programmer Response: The response you should make to the message, and the effect of your response on further processing.

Problem Determination: A list of steps you should perform to obtain data for the programming support personnel to use in their diagnostic efforts in case the problem recurs and you need the support personnel to diagnose the problem.

Database Recovery Control Messages (DSPxxxx)

DSP0001I INSUFFICIENT MAIN STORAGE

Explanation: Sufficient storage was not available to perform the requested utility function.

System Action: The utility function was terminated.

Programmer Response: Increase the region size and rerun the utility function.

Problem Determination: 2, 3, 8

DSP0002I UNABLE TO OPEN *generic-name* DATA SET DSNAME=*dsname* VSAM RETURN CODE=*nn* ERROR CODE=*nnn*

Explanation: The attempt to open a VSAM data set failed. The message variables are:

generic-name
The type of data set (for example, RECON1 or RECON2)

dsname
The name of the VSAM data set that could not be opened

nn The VSAM return code

nnn The VSAM error code from the ACB error field

System Action: The utility function was terminated.

Programmer Response: For an explanation of the VSAM return codes and error codes, see *DFSMS/MVS® Macro Instructions for Data Sets*.

Problem Determination: 1, 2, 3, 8, 20

Module: DSPURI00, DSPURI10, DSPURU00

DSP0002W UNABLE TO OPEN *generic-name* DATA SET DSNAME=*dsname* VSAM RETURN CODE=*nn* ERROR CODE=*nnn*

Explanation: The attempt to open a VSAM data set failed. This message should not occur; if it does, it

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indicates an unexpected RECON contention.

In the message text:

generic-name
Identifies the type of the data set, such as RECON1 or RECON2

dsname
Identifies the name of the VSAM data set that could not be opened

nn The VSAM return code

nnn The VSAM error code from the ACB error field

System Action: DBRC attempts to open the RECON every 90 seconds up to 18 hours.

User Response: Determine which job reserved one or more of the RECONs. Take a DUMP of the job that owns the RECON identified in the message, and take a DUMP of the job that issued the message.

Problem Determination: 1, 2, 3, 8, 20, 40, 41

Module: DSPURI10

DSP0003I UNABLE TO CLOSE *generic-name* **DATA SET DSNAME=***dsname* **VSAM RETURN CODE=***nn* **ERROR CODE=***nnn*

Explanation: An attempt to close a VSAM data set failed. The message variables are:

generic-name
The type of data set (for example, RECON1 or RECON2)

dsname
The name of the VSAM data set that could not be closed

nn The VSAM return code

nnn The VSAM error code from the ACB error field

System Action: The utility function was terminated.

Programmer Response: For an explanation of the VSAM return codes and error codes, see *DFSMS/MVS Macro Instructions for Data Sets*.

Problem Determination: 1, 2, 3, 8, 20

DSP0004I UNABLE TO CREATE VSAM control-block DSNAME=dsname VSAM RETURN CODE=nn REASON CODE=nn

Explanation: An attempt by the GENCB macro to create the identified VSAM control block (for example, RPL, ACB, or EXLST) failed. The dsname identifies the affected data set; the first nn identifies the VSAM return code (returned in register 15); and the second nn identifies the VSAM reason code (returned in register 0).

System Action: The requested operation that requires the control block cannot be performed; the utility function was terminated.

Programmer Response: Determine the cause of the control block failure. For an explanation of VSAM return codes and reason codes, see *DFSMS/MVS Macro Instructions for Data Sets*.

Problem Determination: 2, 3, 8, 20

DSP0005I UNABLE TO MODIFY VSAM control-block DSNAME=dsname VSAM RETURN CODE=nn REASON CODE=nn

Explanation: An attempt by a MODCB macro to modify the identified VSAM control-block (for example, RPL, ACB, or EXLST) failed. The dsname identifies the affected data set; the first nn identifies the VSAM return code (returned in register 15); and the second nn identifies the VSAM reason code (returned in register 0).

System Action: The requested operation that requires the control block could not be performed; the utility function was terminated.

Programmer Response: Determine the cause of the control block failure. For an explanation of VSAM return codes and reason codes, see *DFSMS/MVS Macro Instructions for Data Sets*.

Problem Determination: 2, 3, 8, 20

DSP0006I UNABLE TO ACCESS VSAM control-block DSNAME=dsname VSAM RETURN CODE=nn REASON CODE=nn

Explanation: An attempt by a SHOWCB macro to access the identified VSAM control-block (for example, RPL, ACB, or EXLST) failed. The dsname identifies the affected data set; the first nn identifies the VSAM return code (returned in register 15); and the second nn identifies the VSAM reason code (returned in register 0).

System Action: The requested operation that requires the control block could not be performed; the utility function was terminated.

Programmer Response: Determine the cause for the control block failure. For an explanation of the VSAM return codes and reason codes, see *DFSMS/MVS Macro Instructions for Data Sets*.

Problem Determination: 2, 3, 8, 20

DSP0007I RECORD LENGTH APPROACHING RECON MAXIMUM RECORD LENGTH = *lllllll ppp***% OF RECORDSIZE** *ssssssss* **formatted record key**

Explanation: DBRC just wrote a record to RECON, and the size of the record exceeds the SIZALERT value

specified on the CHANGE.RECON command. In the message text:

llllllll The record size in decimal.

ppp The record's percentage of the maximum size.

ssssssss
The maximum size allowed for a record.

formatted record key
The formatted key of the record displays following this text.

System Action: Processing continues.

User Response: Determine what action is needed, if any, to prevent the specified record from exceeding the maximum size. For additional information on initializing and maintenance for RECON, see the *IMS Version 9: Database Recovery Control (DBRC) Guide and Reference*.

Module: DSPURI00

DSP0008I VSAM LOGICAL ERROR ON *generic-name* DATA SET DSNAME=*dsname* VSAM FEEDBACK CODE=*nnn*

Explanation: The VSAM data set, indicated by *generic-name*, encountered a VSAM logical error that prevented further processing. The information in the message is intended for problem analysis by IBM personnel.

In the message text:

generic-name
The VSAM data set type (for example, RECON1 or RECON2)

dsname
The name of the affected data set.

nnn The VSAM feedback code from the RPL feedback area.

System Action: The request in progress was terminated with an abend and its associated dump.

Programmer Response: Determine the cause of the VSAM logical error. For an explanation of the VSAM feedback codes, see *DFSMS/MVS Macro Instructions for Data Sets*.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0009I VSAM PHYSICAL ERROR ON *generic-name* DATA SET DSNAME=*dsname* VSAM FEEDBACK CODE=*nnn*

Explanation: A physical I/O error occurred while a read or write request was being attempted for the specified VSAM data set. The message variables are:

generic-name
The VSAM data set type (for example, RECON1 or RECON2)

dsname
The affected data set

nnn The VSAM feedback code from the RPL feedback area

Message DSP0010I follows this message to identify the information returned from VSAM for the physical error.

System Action: The utility function was terminated.

Programmer Response: See the DSP0010I message to determine the cause of the physical error. For an explanation of the VSAM feedback codes, see *DFSMS/MVS Macro Instructions for Data Sets*.

Problem Determination: 1, 2, 3, 8, 20

DSP0010I yyddd, hhmmssth, ---rba---,'DATA' or 'INDEX', volser, jobname, stepname, cuu, da, ddname, ccw-op, message text, bbcchhr, vsam

Explanation: A physical I/O error occurred during an attempted read or write operation to a VSAM data set. The message identifies the information returned from VSAM as a result of the error.

System Action: If the utility function could not continue, processing of the function was terminated.

Programmer Response: For an explanation of the fields within this message, see *DFSMS/MVS Macro Instructions for Data Sets*.

Problem Determination: 1, 2, 3, 8, 20

DSP0011I *ddname* DD STATEMENT IS IGNORED - CONTAINS AN INVALID OR MISSING DSNAME

Explanation: The DD statement identified by *ddname* is one of the following:

- Required input but is missing
- Specified as DUMMY
- Contains a data set name of NULLFILE

This message can be issued from an online or batch IMS or DBRC job.

System Action: Processing is terminated.

Programmer Response: Supply a correct DD statement and resubmit the job.

If the message was issued when a utility was running, use DBRC to generate new JCL and compare the new JCL with the original JCL for possible errors.

Problem Determination: 8

DSP0012I SVC nnn IS NOT A VALID DBRC TYPE 4 SVC

Explanation: DBRC initialization has determined that the Type 4 SVC number nnn (nnn = decimal number) is not the valid DBRC SVC. The reason is probably one of the following:

- DBRC's Type 4 SVC was not defined correctly.
- The current release of DBRC's SVC module DSP00MVS was not linked into SYS1.LPALIB or an MLPA library under the name IGC00*** (*** is the signed decimal SVC number; for example, SVC 255 = 25E).
- z/OS was not re-IPLed specifying CLPA or MLPA=xx, or both.

For additional details on the installation of the DBRC Type 4 SVC, see *IMS Version 9: Installation Volume 1: Installation Verification*.

System Action: Processing is terminated.

Programmer Response: Correct the condition that caused the error and retry.

DSP0014I DYNAMIC ALLOCATION FAILED FOR RECONn RETURN CODE=xx REASON CODE=xxxx

Explanation: An attempt to allocate the specified RECON data set failed. The hexadecimal return code, along with the reason code returned from the failing dynamic allocation supervisor call, are identified in the message.

System Action: If the minimum set of RECON data sets is available, processing continues. Otherwise, the utility function is terminated.

Note: In an XRF environment, this message might be issued repeatedly until DBRC is able to reenter dual RECON mode. For information about allocating and initializing RECON data sets, see *IMS Version 9: Installation Volume 1: Installation Verification*; for information about maintaining RECON data sets, see *IMS Version 9: Database Recovery Control (DBRC) Guide and Reference*.

Programmer Response: See *z/OS MVS Programming: Authorized Assembler Services Guide* for an explanation of the return and reason codes returned from the dynamic allocation supervisor call.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0016I DBRC HAS RECOVERED FROM RESERVE ERROR

Explanation: An abend occurred during the processing of a RESERVE request by DBRC for one of the RECON data sets. DBRC has recovered from the abend. This can occur if an I/O error occurs on the volume being reserved.

System Action: The data set for which RESERVE failed will be discarded and processing will continue with the remaining RECON data sets.

Programmer Response: None.

DSP0017I DYNAMIC DEALLOCATION FAILED FOR RECONn RETURN CODE=xx REASON CODE=xxxx

Explanation: An attempt to deallocate the specified RECON data set failed. The hexadecimal return code, along with the reason code returned from the failing dynamic allocation supervisor call, are identified in the message.

System Action: Processing continues.

Programmer Response: See *z/OS MVS Programming: Authorized Assembler Services Guide* for an explanation of the return and reason codes returned from the dynamic allocation supervisor call.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0018I *type* **ERROR ON** *name* **DATA SET, DD NAME** *ddname*

Explanation: During the processing of a GENJCL command, the error identified in the message (OPEN, CLOSE, or I/O) was encountered while accessing the named data set (JCLPDS or JCLOUT). The DD statement for the data set is identified by *ddname*. This message is also issued if an OPEN or CLOSE error was encountered while accessing the MDAPDS data set, `DD NAME IMSDALIB`, during the processing of RECON dynamic allocation.

System Action: Processing of the command terminates. Subsequent commands are not processed.

Programmer Response: Review the information described in Problem Determination, determine the reason for the error, correct the problem, and reissue the command.

Problem Determination: 2, 3, 8

DSP0019I INCOMPLETE SEGMENTED RECORD FOUND

Explanation: During an access of a RECON data set, DBRC could not locate all physical segments for a segmented RECON record. Message DSP0008I or DSP0009I contains more information on the error.

System Action: DBRC discards the data set containing the incomplete record and continues processing if another available data set exists.

Programmer Response: None.

Module: DSPURI00, DSPURI30, DSPURI40

DSP0021I RECON DATA SETS SUCCESSFULLY UPDATED

Explanation: After the completion of the Recovery Control utility command, with which this message is associated, the RECON data sets were successfully updated to reflect the results of the command.

System Action: Processing by the utility continued.

Programmer Response: None.

DSP0022I SIGNOFF NOT PERFORMED FOR SUBSYSTEM ('xxxxxxxx' OR UNKNOWN)

Explanation: After an abend occurred, IMS issued a signoff command to DBRC. Because DBRC was active at the time of the abend, DBRC is unable to process the signoff request.

Programmer Response: Take appropriate action to recover. If this message is followed by message DFS0036I (BATCH BACKOUT IS REQUIRED), then run batch backout. Otherwise issue a `CHANGE.SUBSYS` command specifying the abnormal parameter.

Problem Determination: 1, 2, 3, 8 and listing of the RECON data set.

DSP0024I RECON(n) HEADER RECORD MISSING OR INVALID

Explanation: Either a header record, which identifies a RECON data set, could not be found in the identified RECON data sets, or a record with the correct key did not contain identifying information.

System Action: Processing terminates.

Programmer Response: If the identified RECON data set has not been initialized as a RECON data set, use the `INIT.RECON` command of the Recovery Control utility to initialize it. If the RECON Upgrade utility has just been invoked, ignore this message. If the data set has been initialized as a RECON data set (that is, the header record should exist and be correct), the header record has been inadvertently modified and should be corrected. If the other RECON data set does contain a valid header record, use an Access Method Services `REPRO` command to copy it to the one that contains the invalid header record.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0025I RECON RECORD ALREADY EXISTS RECORD KEY=record key

Explanation: A command to add a record to the RECON data set failed because a record with an identical key already exists.

System Action: The command failed, and subsequent commands were not processed.

Programmer Response: Make the command unique, and then reissue it and any subsequent commands that were not executed.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

Module: DSPURI00

DSP0026I UNABLE TO BUILD VSAM LSR POOL - REASON CODE = nn

Explanation: DBRC was unable to build the local shared resource (LSR) pool needed to process the RECON in an ESA environment. Reason code nn corresponds to the codes given for the Build VSAM Resource Pool (BLDVRP) macro described in *DFSMS/MVS Macro Instructions for Data Sets*.

System Action: DBRC reverts to the use of the Non Shared Resource (NSR) option to process the RECON, which degrades DBRC performance. As a result, DBRC will attempt to reissue the BLDVRP macro later if it detects a reconfiguration of the RECONs by another copy of DBRC. If the condition causing the problem does not clear up, this message might repeat itself periodically. This condition does not affect the integrity of the RECON data set. For details about LSR and NSR processing of VSAM data sets, see *DFSMS/MVS Macro Instructions for Data Sets*.

Programmer Response: For reason code 8 (not enough storage is available), increase the size of the region in which DBRC is executing or decrease the number of index or data buffers DBRC is using in LSR mode. *IMS Version 9: Customization Guide* explains how the buffer size specification facility controls the number of buffers used for RECON data sets.

For reason code 4 or 32, DBRC and some other program product within the same address space are in contention for the use of all VSAM LSR buffer pool IDs. If possible, modify the other programs to use fewer VSAM LSR buffer pool IDs to process VSAM data sets.

Problem Determination: 2, 3, 8, 35, and a description of the operating environment being used when this message was issued. (For example, batch job, running under TSO, DBRC attached by a user/vendor product, and so on)

DSP0027I RECONn DATA SET IS FULL

Explanation: All space allocated for the RECON data set that is identified in the message has been used.

System Action: No more records were written to the identified RECON data sets. An error indicator was set in the header records of both RECON data sets.

Programmer Response: Increase the space allocation for the identified RECON data sets (using an

ALTER command of Access Method Services); copy the other RECON data sets to the one with the additional space (using a REPRO command of Access Method Services); and issue a CHANGE.RECON command to reset the error indicators in the header records of both RECON data sets. (The error indicator in the RECON data sets that was used as the source was copied to the target RECON data sets.) It is recommended that the allocations of the two RECON data sets be of different sizes to prevent both RECON data sets from becoming full at the same time.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0028I RECON DATA SETS MUST BE INITIALIZED

Explanation: A request to access or update the RECON data sets failed because the RECON data sets have never been initialized.

System Action: The request failed.

Programmer Response: If there are incorrect data sets on the RECON1 and RECON2 DD statements, correct them. If the correct data sets are identified in the RECON1 and RECON2 DD statements, issue an INIT.RECON command to initialize them as RECON data sets. Rerun the job step that failed, after making the corrections.

Problem Determination: 2, 3, 8, and listings of the RECON data sets that were produced by an Access Method Services PRINT command.

DSP0029I RECORD WITH LENGTH OF *nnnnnnnn* BYTES EXCEEDS THE MAXIMUM DBRC RECON RECORD SIZE OF *nnnnnnnn* BYTES RECORD KEY

Explanation: An attempt to add or change a record in the RECON data sets failed because the maximum DBRC record size defined for the RECON data sets was exceeded. *nnnnnnnn* is a decimal value representing the number of bytes.

Following message DSP0029I, an additional line of output shows the formatted record key. If the record key contains an invalid type, this message is followed by message DSP0186I and the hexadecimal printout of the record key.

System Action: The record was not added or changed. Processing by the utility that attempted to add or change the record was terminated.

Programmer Response: Increase the RECORDSIZE value on the VSAM DEFINE CLUSTER statement for the RECON data sets, and then rerun the utility job step that failed. For information on defining the RECON data sets, see the *IMS Version 9: Installation Volume 1: Installation Verification*.

If message DSP0029I is received from the BACKUP.RECON command, you must use the Access Method Services IDCAMS REPRO command or DFSMSdss to back up the RECON.

If this message is received as a result of a pre-Version 8 DBRC command being issued against a Version 8 RECON, issue a Version 8 DBRC command instead.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0031I DATA BASE NOT REGISTERED IN RECON DBD=database name

Explanation: A DBRC command was issued referencing a nonexistent database record.

System Action: The command fails and subsequent commands are not processed. The RECON data set is not updated.

Programmer Response: Determine if the database name is invalid or incorrectly spelled. Correct the error; then issue the command and all subsequent commands that were not processed.

Module: DSPURCM8, DSPURDPT, DSPURMPT

Problem Determination: 2, 3, 8, and listings of the RECON data set.

DSP0032I RECON DATA SET ALREADY UPGRADED

Explanation: A request was made to upgrade RECON data sets that are already at the current level.

System Action: Processing is terminated.

Programmer Response: None required.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0034I RECON INCONSISTENCY, PARTITION RECORD CANNOT BE FOUND DBD=..... PART=.....

Explanation: DBRC was unable to locate the partition record associated with a partition database record (TYPE=PART). There is an inconsistency in the RECON data sets; all partition database records must have a corresponding partition record.

System Action: Processing terminates. The RECON data sets are not updated.

Programmer Response: Contact the IBM Support Center for assistance.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0036I UPGRADE ATTEMPTED WHILE RECON MULTIPLE UPDATE FLAG IS ON

Explanation: The RECON data sets multiple-update flag in the RECON header record is on. The RECON Upgrade utility cannot be run until the flag is turned off.

System Action: Processing is terminated.

Programmer Response: The RECON multiple-update flag is turned off during the normal update activity that occurs in the RECON data sets. Issue the DBRC `CHANGE.RECON` command with no parameters specified, and rerun the RECON Upgrade utility.

DSP0037I RECON DATA SET NOT UPGRADED

Explanation: A DBRC request or command was issued for a RECON data set that was not upgraded.

System Action: Processing is terminated.

Programmer Response: Run the RECON Upgrade utility before attempting to use the RECON with a new release of IMS.

Problem Determination: None.

DSP0038I RECON INCONSISTENCY RECON HEADER RECORD NOT FOUND

Explanation: DBRC was unable to find the RECON header record during a command other than the `INIT.RECON` command. There is an inconsistency in the RECON data sets.

System Action: Processing is terminated. The RECON data sets are not updated. Subsequent commands are not processed.

Programmer Response: Attempt to execute the command that failed. If the problem persists, contact your IBM Support Center for assistance in problem resolution.

Problem Determination: 2, 3, 8, 35, the dump provided by ABEND processing, and listings of the RECON data sets.

DSP0040I UNABLE TO LOAD MODULE (modname)

Explanation: During the initialization of DBRC in the IMS system, the module (modname) could not be loaded.

System Action: Processing is terminated.

Programmer Response: Make sure that the DBRC modules reside in the library defined by the JCL. If the DBRC modules do reside in the correct library, then sufficient storage was not available to load the module (modname). Increase the region size to allow DBRC to load the module.

Problem Determination: 2, 3, 8, 10, 13

DSP0041I RECON INCONSISTENCY DB RECORD CANNOT BE FOUND DBD=database name

Explanation: DBRC was unable to find the database record associated with a database data set record during a `DELETE.DBDS` command, or a `CHANGE.DBDS` command with one of the following parameters specified: ICON, ICOFF, RECOV, or NORECOV. There is an inconsistency in the RECON data sets, because all database data set records must have a corresponding database record.

Alternatively, DBRC was unable to find the database record associated with an allocation, image copy, reorganization, or recovery record while executing a `NOTIFY.IC`, `NOTIFY.UIC`, `NOTIFY.RECOV`, `NOTIFY.REORG`, `NOTIFY.ALLOC`, or other database-oriented command. There is an inconsistency in the RECON data set in as much as each of the record types listed above must have a corresponding database record.

System Action: Processing is terminated. The RECON data sets are not updated.

Programmer Response: Attempt to execute the command that failed. If the problem persists, contact your IBM Support Center for assistance in problem resolution.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0042I RECON INCONSISTENCY CAGRP RECORD REFERENCED BY DBDS RECORD CANNOT BE FOUND DBD= dbdname DDN= ddname CAGRP= cagrp name

Explanation: DBRC was unable to find the CAGRP record associated with the DBDS record or the AREA record during command processing. The DBDS or AREA record indicated that the DBDS was a member of the specified CA group, but the CA group was not registered in the RECON data set. This indicates an inconsistency in the RECON data set.

System Action: If the error occurred during the processing of a LIST command, processing continues. Otherwise the command failed, and subsequent commands are not processed.

Programmer Response: Attempt to execute the command that failed. If the problem persists, contact your IBM Support Center for assistance in problem resolution.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0043I DATA BASE ALREADY REGISTERED IN RECON DBD=database name

Explanation: The database specified in the DBD parameter of the INIT.DB command already exists.

System Action: Processing is terminated. The RECON data sets are not updated.

Programmer Response: Determine if the database name was invalid, inadvertently specified, or incorrectly spelled. Correct the error and run the INIT.DB command again.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0044I DATA BASE STILL AUTHORIZED BY A SUBSYSTEM

Explanation: During a DELETE.DB or a CHANGE.DB command, the database to be deleted or changed was still authorized by a subsystem (the DB record had subsystem entries). This is not permitted.

For a CHANGE.DB command, the NORECOV|RECOVABL keyword cannot be specified for an authorized database.

System Action: Processing is terminated. The RECON data set is not updated. Subsequent commands are not processed.

Programmer Response: If the DB record is still to be deleted, all subsystem records referred to by the DB record must first be deleted.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0045I DATA BASE STILL AUTHORIZED BY A SUBSYSTEM DBD=database name

Explanation: During a CHANGE.DB (ALL) command, an attempt to change the share level of a database was made while the database was still authorized by a subsystem (the DB record had subsystem entries).

During a CHANGE.DB command, the database was still authorized. The database must be unauthorized before the command can continue.

During a CHANGE.DB UNAUTH command, a subsystem record matching the specified SSID still exists in the RECON. The database authorization cannot be removed with the CHANGE.DB command under this condition. Use CHANGE.SUBSYS STARTRCV and CHANGE.SUBSYS ENDRECOV commands instead.

During a CHANGE.DBDS command for a full-function database, an attempt was made to change the ddname, add or delete an error queue element (EQE), change the data set name, or change the recovery-needed status (RECOV/NORECOV) while the database was still authorized by a subsystem.

A DELETE.SUBSYS or CHANGE.DBDS command can also issue this message when the specified database is still authorized to the specified subsystem. The CHANGE.DB, DELETE.SUBSYS, or CHANGE.DBDS command is not permitted at this time.

System Action: Processing is terminated. The RECON data sets are not updated.

Programmer Response: Wait until the databases have been unauthorized.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0046I SUBSYSTEM ID NOT FOUND IN DATA BASE RECORD DBD=database name SSID=subsystem id

Explanation: During a CHANGE.DB command, the specified database did not contain the subsystem name identified by the SSID parameter.

System Action: Processing is terminated. The RECON data sets are not updated.

Programmer Response: In order to change the database record, first change all subsystem records referred to by the database record.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0047I SUBSYSTEM ALREADY MARKED ABNORMAL SSIDNAME=subsystem-name

Explanation: A CHANGE.SUBSYS command was issued with the ABNORMAL parameter specified. However, the SUBSYS record in RECON was already marked abnormal. The abnormal attribute is not changed; however, other parameters on the command are honored.

System Action: Processing continues.

Programmer Response: None.

Problem Determination: None.

DSP0048I SUBSYSTEM ALREADY REGISTERED IN RECON SSID=subsystem-name

Explanation: The subsystem identified in the SSID parameter of the NOTIFY.SUBSYS command already exists.

System Action: Processing is terminated. The RECON data sets are not updated.

Programmer Response: Determine if the subsystem name was invalid, inadvertently specified again, or incorrectly spelled. Correct the error and issue the

NOTIFY.SUBSYS command again.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0049I AREA STILL AUTHORIZED BY A SUBSYSTEM

Explanation: During DBRC command processing (that is, DELETE.ADS, DELETE.DBDS, DELETE.DB or CHANGE.ADS), it was discovered that the Fast Path data entry database or area to be deleted was still authorized by a subsystem (the area record had subsystem entries). This is not permitted.

System Action: Processing is terminated. The RECON data sets are not updated, and subsequent commands are not processed.

Programmer Response: If the database or area record is still to be deleted or changed, the area must first be unauthorized by all subsystems that have authorized it.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0050I AREA IS STILL AUTHORIZED BY A SUBSYSTEM DBD=database name, SSID=subsystem ID

Explanation: During DBRC command processing (that is, CHANGE.DB, CHANGE.DBDS, or INIT.ADS AVAIL), it was discovered that an attempt to change or initialize a database, area, or area data set record was made while the area was still authorized by a subsystem (the area record had subsystem entries).

During a CHANGE.DBDS command, the area was found still to be authorized. The area must be unauthorized before the command can complete.

System Action: Processing is terminated. The RECON data sets are not updated, and subsequent commands are not processed.

Programmer Response: Wait until the areas have been unauthorized.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0051I AREA DATA SET NOT DEFINED IN RECON DBD=database name AREA=area name ADDN=area data set dd name

Explanation: During execution of the DEDB Initialization utility, Database Recovery utility, or during a DBRC command processing (that is, CHANGE.ADS or DELETE.ADS), a request for information from the RECON data set related to the identified area data set failed because the RECON data set has no record of the area data set.

System Action: This command failed.

Programmer Response: Correct the command so it identifies an area data set identified to the RECON data sets.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0052I AREA NOT DEFINED IN RECON DBD=database name AREA=area name

Explanation: This message is issued because one of the following occurred:

- During execution of the Recovery Control utility and the Online Image Copy utility, the identified area was not found in the RECON data set.
- During execution of the DEDB Initialization utility, the identified area was not found in the RECON data set.
- During DBRC command processing a request for information from the RECON data set related to the identified area failed because the RECON data set has no record of the area.
- During execution of a Begin or End HSSP image copy exit, the identified area was not found in the RECON data set.

System Action: This command failed.

Programmer Response: Correct the command so that it specifies an area identified to the RECON data set. In the second case, since normal processing continues, there is no programmer response.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0053I AREA ALREADY DEFINED TO RECON DBD=database name AREA=area name

Explanation: During execution of the INIT.DBDS command, the area record being created is not in the RECON data set, but the AREA AUTH record is already in RECON. This is a DBRC internal error message.

System Action: The command failed, and subsequent commands were not processed.

Programmer Response: Attempt to rerun the command that resulted in the error. If the problem persists, contact the IBM Support Center for assistance.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0054I AREA DATA SET ALREADY DEFINED TO RECON DBD=database name AREA=area name ADDN=area data set dd name

Explanation: During DBRC command processing (that is, CHANGE.ADS, INIT.ADS), the specified AREA data set was already registered in the RECON data set. The dbd

name, area name, and area ddname fields uniquely identify the Fast Path area data set.

System Action: The command failed, and subsequent commands were not processed.

Programmer Response: Determine why the command specified a previously-initialized area data set. Correct and reissue the command, if appropriate.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0055I NO *type* DB RECORD EXISTS IN RECON

Explanation: The LIST.DB TYPEIMS, LIST.DB TYPEFP, or LIST.DB TYPHALDB command was issued, but no *type* record exists in the RECON data set. *type* is one of the following:

- TYPE IMS
- TYPE FPE
- TYPE HALDB

System Action: Processing continues.

Programmer Response: None.

DSP0057I MESSAGE BUFFER FULL, OUTPUT TRUNCATED

Explanation: The output from a /RMx online DBRC command was greater than could be placed in the output buffer passed by IMS.

System Action: The processing of the command is terminated, and any remaining output is discarded.

Programmer Response: Use the DBRC Recovery Control utility to reissue the `/RMx` command to obtain the completed output.

Problem Determination: None.

DSP0058I RMx COMMAND COMPLETED

Explanation: This message is issued when the command processing has been completed prior to returning to IMS.

System Action: The system continues processing.

Programmer Response: None.

Problem Determination: None.

DSP0059I RM COMMAND EXECUTION TERMINATED, verb [modifier] NOT SUPPORTED

Explanation: This message is issued when command processing has detected an invalid verb or modifier during online command execution.

System Action: The system continues processing.

Programmer Response: Correct the verb or modifier.

Problem Determination: None.

DSP0060I NO PARTITIONS REGISTERED FOR THE DATABASE DBDNAME=*db name*

Explanation: The command is attempting to process all of the partitions of a HALDB, identified by *db name*. However, no partitions exist for the database in the RECON data set. Every HALDB must have at least one partition defined.

System Action: LIST command processing continues. Other processing is terminated.

Programmer Response: Contact the IBM Support Center for assistance.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0061I SUBSYS SSID=ssidname CURRENTLY ACTIVE, COMMAND REQUEST REJECTED

Explanation: An online IMS subsystem is not allowed to delete its subsystem entry in RECON with the `/RMD` command or to do a CHANGE.SUBSYS SSID(ssidname) ABNORMAL against it using the `/RMC` command.

System Action: The `/RMD` or `/RMC` command failed.

Programmer Response: Do not enter a `/RMD` or `/RMC` command using the SSID of this subsystem.

Problem Determination: None.

DSP0062I NO DATA BASE DATA SET REGISTERED FOR THE DATA BASE DBD=dbd name

Explanation: A `LIST.DB`, `LIST.HISTORY`, or `LIST.DBDS` command was issued specifying a database name without specifying a ddname. There were no database data sets or DEDB AREAs registered in the RECON data set for the specified database. Alternatively, a `LIST.RECON` was issued and there were no database data sets or DEDB AREAs registered for one of the databases in the RECON data sets.

System Action: Processing continues with this message.

Programmer Response: None required.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0063I IMAGE-COPY DATA SET WITHIN RECOVERY PERIOD CANNOT BE REUSED DBD=dbdname DDN=ddname RUNTIME=oldest ic time

Explanation: Verification exit processing, which occurs before executing the Image Copy utility, determined that

- The GENMAX was reached.
- The oldest image copy is within the recovery period and cannot be reused.
- No available image copies exist.

System Action: Processing is terminated.

Programmer Response: Issue the `INIT.IC` command to define an available image copy of the required type, or issue the `CHANGE.DBDS` command to change the recovery period.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0064I IMAGE-COPY DATA SET WITHIN RECOVERY PERIOD CANNOT BE DELETED DBD=*dbdname* DDN=*ddnname* RUNTIME=*oldest IC time*

Explanation: This message is issued because one of the following occurred:

- Verification exit processing (which occurs before executing an image copy utility) determined that the oldest IC in RECON could not be deleted when the specified DBDS was defined in the RECON data set as having a NOREUSE attribute. The GENMAX value has been reached, but the recovery period has not been exceeded.
- During the execution of the `CHANGE.DBDS` command, the IC within the recovery period cannot be deleted to meet the value of GENMAX that is being changed by the `CHANGE.DBDS` command. The new GENMAX value is recorded.

System Action: The processing is terminated.

Programmer Response: The current RECOVPD value for the DBDS can result in more image copies maintained by DBRC than specified by GENMAX. Review your RECOVPD and GENMAX values and use the `CHANGE.DBDS` command to adjust them if necessary.

Problem Determination: 2, 3, 8, and listings of the RECON data set.

DSP0065I PREDEFINED IC HAS BEEN USED, GENMAX EXCEEDED DBD=*dbdname* DDN=*ddnname*

Explanation: Verification exit processing, which occurs before executing the Image Copy utility, determined that:

- GENMAX was reached.
- The oldest image copy is within the recovery period and cannot be reused.

A predefined IC will be used, which remains available in the RECON data set until the Image Copy utility successfully completes.

System Action: Processing continues.

Programmer Response: The current RECOVPD value for the DBDS can result in more image copies maintained by DBRC than specified by GENMAX. Reevaluate your RECOVPD and GENMAX values and use the `CHANGE.DBDS` command to adjust them if necessary.

DSP0067I IMPLIED DBDS GROUP DBD= dbname IS EMPTY

Explanation: An implied DBDS group was specified on a `GENJCL` command. (For example, DBD was specified without a DDN or area specification.) However, there are no database data sets or DEDB AREAs registered in the RECON data set for the specified database.

System Action: The command failed, and subsequent commands are not processed.

Programmer Response: Reissue the command, specifying the correct database name.

Problem Determination: 2, 3, 8 and a listing of the RECON data sets.

DSP0068I DDN OR AREA PARAMETER INVALID WITH GROUP PARAMETER

Explanation: The command requested processing of a DBDS group or CA group, but a specific DDN or AREA was also specified. This combination of parameters is invalid.

System Action: The command failed, and subsequent commands are not processed.

Programmer Response: Correct the parameters, and reissue the command.

Problem Determination: 2, 3, 8, and a listing of the RECON data sets.

DSP0069I NO AVAILABLE SUBSYSTEM ENTRIES LEFT

Explanation: NOTIFY.MN processing has encountered an MN record that already has 64 subsystem entries, and a request is received to add another subsystem entry.

System Action: Processing of this `NOTIFY.MN` command is terminated. The existing MN record in the RECON data sets remains unchanged.

Programmer Response: Merge the records.

Problem Determination: None.

DSP0070I GRPNAME grpname ALREADY DEFINED TO RECON

Explanation: An attempt to add a DBDS group or CA group record to the RECON data set failed. A DBDS or CA group record with the same group name already exists in the RECON data set.

System Action: The command failed, and subsequent commands are not processed.

Programmer Response: Reissue the command with a different group name.

Problem Determination: 2, 3, 8, and a listing of the RECON data sets.

DSP0071I DBDS OR DEDB AREA NOT DEFINED IN RECON, NAME=(dbname,ddname)

Explanation: An `INIT.DBDSGRP` or `CHANGE.DBDSGRP` command was issued and the MEMBERS or ADDMEM list contained the name of a DBDS or DEDB AREA that was not defined in the RECON data set.

System Action: The command failed, and subsequent commands are not processed.

Programmer Response: Correct the member name, and reissue the command.

Problem Determination: 2, 3, 8, and a listing of the RECON data sets.

DSP0072I DUPLICATE GROUP MEMBER SPECIFICATION, NAME= (dbname,ddname)

Explanation: An `INIT.DBDSGRP` or `CHANGE.DBDSGRP` command was issued, and a duplicate member name appeared in the corresponding MEMBERS, ADDMEM, or DELMEM list.

System Action: The command failed, and subsequent commands are not processed.

Programmer Response: Check for a duplication and a possible omission.

Problem Determination: 2, 3, 8, and a listing of the RECON data sets.

DSP0075I NAME TO BE DELETED FROM GROUP= name IS NOT A MEMBER. NAME= (dbname,ddname)

Explanation: An attempt to delete the specified member from a DBDS or CA group failed because the member was not found in the specified group.

System Action: The command failed, and subsequent commands are not processed.

Programmer Response: Determine the correct member or group name and reissue the command.

Problem Determination: 2, 3, 8, and a listing of the RECON data sets.

DSP0076I NAME TO BE ADDED TO GROUP= name IS ALREADY A MEMBER. NAME= (dbname,ddname)

Explanation: An attempt to add the identified member to a CA or DBDS group failed because the member already exists in the specified group.

System Action: The command failed, and subsequent commands are not processed.

Programmer Response: Determine the correct member name and reissue the command.

Problem Determination: 2, 3, 8, and a listing of the RECON data sets.

DSP0077I CANNOT DELETE *rrr nnnnnnnn* **- IT BELONGS TO RECOVERY GROUP** *gggggggg*

Explanation: A DBRC function attempted to delete a RECON record. The record cannot be deleted in DBRC versions prior to version 7 because the record belongs to a version 7 recovery group.

- *rrr* indicates a record type of DB or AAUTH
- *nnnnnnnn* identifies the DB or area name
- *gggggggg* identifies the name of a version 7 recovery group

System Action: The DBRC command fails, and subsequent commands are not processed.

User Response: Delete the database or area in IMS version 7.

Module:

DSP0078I *dbname* **{***areaname***} ALREADY IN RECOVERY GROUP** *grpname*

Explanation: An `INIT.DBDSGRP RECOVGRP` or `CHANGE.DBDSGRP ADDRECOV` command is being processed. The database or area specified by *dbname* and *areaname* cannot be added to the recovery group because it already belongs to another recovery group.

System Action: The command is not executed.

System Programmer Response: Delete the database or area from the other recovery group or correct the command.

DSP0079I RECORD NOT ACCESSIBLE

Explanation: A DBRC function attempted to retrieve a RECON record only accessible to a later DBRC release. The formatted record key is displayed after this message is issued. This message can also be followed by other error messages or unpredictable results.

This message can be issued when a CAGRP or DBDSGRP record containing DBDS names that belong to partitioned databases is used, or when records inaccessible to this release are accessed or changed. Examples of inaccessible records are DB or DBDS records belonging to partitioned databases, and DBDSGRP records designated as recovery groups.

System Action: Execution continues.

User Response: Do not attempt to access RECON records with inappropriate DBRC releases.

Module: DSPURUCO

DSP0080I *dbtype* **DB NOT ELIGIBLE FOR RECOV GRP - NAME=** *dbname*

Explanation: You attempted to add an ineligible type of database to a recovery group. In the message:

dbtype Is one of the following types:

- FAST PATH
- PARTITION

dbname
The name of the database that was to be added.

A recovery group can be defined with only DL/I (non-HALDB) databases, HALDB databases, or Fast Path areas. Fast Path databases and partition databases are not allowed as part of a recovery group.

System Action: The command fails and subsequent commands are not processed.

User Response: Redefine the recovery with only the following types and resubmit the job:

- DL/I (non-HALDB) database
- HALDB database
- Fast Path area

Module: DSPURM70

DSP0081I DATA SETS BEING USED ARE PREDEFINED IN RECON

Explanation: Data sets are predefined in the RECON data sets for use by the utility that was running. The database data set or change-accumulation group being used by the utility is identified in the RECON data sets with the REUSE attribute.

System Action: Processing by the utility continues.

Programmer Response: None.

Problem Determination: None.

DSP0084I INITIALIZE MORE IMAGE COPY DATA SETS TO RECON DBDNAME=dbdname DDNAME=ddname

Explanation: The identified database data set or area is defined in the RECON data set with the REUSE attribute, and the maximum number of image copy data sets (IDSs) has not been reached. However, no predefined IDSs for the identified database data set or area remain for use by the Image Copy utility or by HSSP image copy processing.

System Action: Processing by the Image Copy utility or the Begin HSSP IC exit terminates.

Programmer Response: Issue the `INIT.IC` command to create an available IDS for the identified database data set or area, and record it in the RECON data set. As an alternative, issue a `CHANGE.DBDS` command to change the maximum number of generations to be maintained so that it equals the number of image copy data sets already in use. Then rerun the Image Copy utility job that failed or re-invoke the HSSP application.

Problem Determination: None.

DSP0085I INITIALIZE MORE CHANGE ACCUMULATION DATA SETS TO RECON CAGRP=name

Explanation: The identified change-accumulation group is defined in the RECON data sets with the REUSE attribute, and the maximum number of change-accumulation data sets to be maintained for it has not yet been reached. However, no records of available change-accumulation data sets remain for use by the Change Accumulation utility.

System Action: Processing by the Change Accumulation utility was terminated.

Programmer Response: Create for the identified database data set an empty change-accumulation data set and record its existence in the RECON data sets. As an alternative, a `CHANGE.CAGRP` command can be issued to change the maximum number of change-accumulation data sets to be maintained so that it equals the number of change-accumulation data sets already in use. Then rerun the Change Accumulation utility job that failed.

Problem Determination: None.

DSP0087I GROUP MEMBER COUNT WILL EXCEED ALLOWABLE MAXIMUM

Explanation: While defining a new DBDS or CA group, or while changing an existing DBDS or CA group, the number of group members exceeded the maximum of 32767.

System Action: The command failed, and subsequent commands are not processed.

Programmer Response: Limit the number of group

members to 2000 and reissue the command.

Problem Determination: 2, 3, 8, and a listing of the RECON data set.

DSP0088I DBRC EXTERNAL TRACE IS NOT ACTIVATED. GTF WAS NOT STARTED.

Explanation: This is a warning message. Because GTF had not been started, DBRC external trace (GTF trace) was not activated.

System Action: DBRC trace records will not be placed in a GTF data set.

Programmer Response: If the user wants to have DBRC trace records in a GTF data set, GTF must be started for the USR events as the external mode. For the full descriptions of GTF, refer to *MVS/ESA Service Aids*.

DSP0089I AN IMAGE COPY IS RECOMMENDED FOR DBD=*dbd* DDN=*ddn*¦AREA=*areaname*

Explanation: A request was made to DBRC to update a database identified by *ddn* or *areaname*. However, the DBDS or area has not been image copied yet. Without an image copy, you might not be able to recover the DBDS or area.

Programmer Response: Schedule an image copy of the identified area or DBDS. If you determine that an image copy is not necessary, use the `CHANGE.DBDS ICOFF` command to reset the IC RECOMMENDED status.

DSP0090I CONCURRENT IMAGE COPY OF A NON-RECOVERABLE DATA BASE IS NOT ALLOWED.

Explanation: A concurrent image copy was attempted for a database which is marked as non-recoverable or user-recoverable. Allocation records are not recorded in the RECON for user-recoverable databases, therefore, concurrent image copy is not supported. Changes are not logged for a non-recoverable database; therefore, the image created of it by a concurrent image copy is fuzzy and not usable.

This message is issued during execution of the `GENJC.IC` command, the Database Image Copy utility (DFSUDMP0), or the Database Image Copy 2 utility (DFSUDMT0).

System Action: If the error occurs during execution of the `GENJCL.IC` command, the command fails and subsequent commands are not processed. If the error occurs during execution of the Database Image Copy utility, processing of the utility terminates.

User Response: Execute the Image Copy utility without the CIC execution parameter.

DSP0092I HSSP IMAGE COPY PROCESSING HAS ALREADY BEEN ENDED DBDNAME=dbdname AREANAME=areaname

Explanation: A request was made to end an HSSP IC in which processing has already been terminated.

System Action: Processing by the End HSSP IC exit was terminated or the `CHANGE.IC` command failed and subsequent commands were not processed.

Programmer Response: If the `CHANGE.IC` command was issued, determine if the command correctly identified the HSSP Image Copy for which processing is being terminated and reissue the command. Otherwise, this is an internal HSSP error, contact the IBM support center for assistance.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0093I NO DBDSGRP RECORD FOUND IN RECON

Explanation: A `LIST.DBDSGRP ALL` or `LIST.RECON` command was issued, but no DBDSGRP record was found in the RECON data set.

System Action: Processing continues.

Programmer Response: None required.

Problem Determination: 2, 3, 8, and a listing of the RECON data sets.

DSP0094I GRPNAME grpname DOES NOT EXIST IN RECON

Explanation: A command expected to find the identified group in the RECON data set, but the group is not defined in the RECON data set.

System Action: The command failed.

Programmer Response: None required.

Problem Determination: 2, 3, 8, and a listing of the RECON data sets.

DSP0095I DBDS GROUP RECORD DELETED, GRPNAME= name

Explanation: All members of the identified DBDS group and the empty group record were deleted.

System Action: None

Programmer Response: None required.

DSP0099I THE AREA DOES NOT HAVE THE IC DATA SET REUSE ATTRIBUTE DBDNAME=dbdname AREANAME=areaname

Explanation: HSSP Image Copy requires an area to have reusable image copy data sets.

System Action: Processing by the Begin HSSP IC exit was terminated or the command failed and subsequent commands were not processed.

Programmer Response: Issue the CHANGE.DBDS REUSE command for the specified area. If an HSSP application was terminated then issue the INIT.IC command for the specified area to identify new image copy data sets to RECON, and restart the HSSP application. If a DBRC command failed then reissue it and any others that were not processed.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0101I IMAGE COPY DATA SET CANNOT BE PREDEFINED DBDNAME=dbdname DDNAME=ddname

Explanation: The identified database data set or area data set is identified in the RECON data set with the NOREUSE attribute. Empty image copy data sets for this database data set or area data set can be recorded in the RECON data set only if the database data set or area data set is redefined with the REUSE attribute.

System Action: The INIT.IC command failed, and subsequent commands were not processed. No change was made in the RECON data sets.

Programmer Response: Determine if the command was incorrect. If so, correct and reissue it. Otherwise, use a CHANGE.DBDS command of the Recovery Control utility with the REUSE parameter to predefine image copy data sets for the identified DBDS or area data set. Then reissue the command that failed.

Problem Determination: None.

DSP0102I CHANGE ACCUMULATION DATA SET CANNOT BE PREDEFINED CAGRP=name

Explanation: The identified change-accumulation group is identified in the RECON data sets with the NOREUSE attribute. Empty change-accumulation data sets for this change-accumulation group might be recorded in the RECON data sets only if the change-accumulation group is redefined with the REUSE attribute.

System Action: The INIT.CA command failed, and subsequent commands were not processed. No change was made to the RECON data sets.

Programmer Response: Determine if the command was incorrect. If so, correct and reissue it. Otherwise, use a CHANGE.CAGRP command of the Recovery Control utility with the REUSE parameter to predefine change-accumulation data sets for the identified CA group. Then reissue the command that failed.

Problem Determination: None

DSP0103I DATA SET NAME DOES NOT FOLLOW NAMING CONVENTION DSNAME=dsname

Explanation: The identified data set name does not adhere to the optional data-set naming convention of the Recovery Control utility for data sets being identified in the RECON data sets.

System Action: The data set name was accepted, but its uniqueness cannot be ensured.

Programmer Response: No action required. If the data set name is to adhere to the naming convention, use the appropriate command to change the data set name.

Problem Determination: None.

DSP0104I DSNAME IS NOT UNIQUE WITHIN RECON DSNAME=dsname

Explanation: An attempt was made to add the name of an image copy data set or a change-accumulation data set to the RECON data sets. The name is identical to a data set name that already exists there.

System Action: This command of the Recovery Utility failed, and subsequent commands were not processed. No changes were made in the RECON data sets.

Programmer Response: Reissue the command, specifying a unique data set name; reissue any other commands that were not processed.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0105I parm1 PARAMETER SPECIFIED WITHOUT CORRESPONDING parm2 PARAMETER

Explanation: parm1 requires that parm2 also be specified; parm2 was not specified in the command.

System Action: Processing is terminated. The RECON data set is not updated. Subsequent commands were not processed.

Programmer Response: Add the missing parameter to the command. Then reissue the command that failed, and any other commands that were not processed.

Problem Determination: 2, 3, 8

DSP0106I parm1 TIME-STAMP time-stamp NOT WITHIN VALID RANGES

Explanation: The time-stamp value of the identified parameter is not within valid ranges. The time-stamp field is a formatted image of the invalid time stamp.

System Action: This command failed, and subsequent commands were not processed.

Programmer Response: Correct the invalid time stamp. Reissue the command that failed, and any other commands that were not processed.

Problem Determination: 2, 3, 8

DSP0107I DATA BASE DATA SET ALREADY DEFINED TO CA-GROUP name DBDNAME=dbdname DDNAME=ddname

Explanation: The request to add the identified database data set or area data set to the identified change-accumulation group failed because the database data set or area data set is already a member of the change-accumulation group.

System Action: This command failed, and subsequent commands were not processed.

Programmer Response: Correct the name of the database data set or area data set if it was specified incorrectly, or redefine the change-accumulation group before reissuing the unchanged command. Reissue any other commands that were not processed.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0108I DATA BASE DATA SET CANNOT BE INCLUDED IN CA-GROUP *grpname* **DBDNAME=***dbdname* **DDNAME=***ddname*

Explanation: The request to add the identified database data set or area data set to the change-accumulation group identified by *grpname* failed because the database data set or area data set is:

- Not identified in the RECON data sets.
- A user-recoverable area. User-recoverable areas cannot be added to a change-accumulation group.

System Action: This command failed, and subsequent commands were not processed.

Programmer Response: Correct the name of the database data set or area data set if it was specified incorrectly. If the database data set or area data set is not identified in the RECON data set, use an `INIT.DBDS` or `INIT.ADS` command to do so. Then reissue the command that failed and any other commands that were not processed.

Problem Determination: 2, 3, 8, and listings of the RECON data set.

DSP0109I DATA BASE DATA SET NOT DEFINED IN RECON DBDNAME=dbdname DDNAME=ddname

Explanation: This message is issued because one of the following occurred:

- During execution of the Recovery Control utility, a request for information from the RECON data set related to the identified database data set failed because the RECON data set has no record of the database data set.
- During execution of the IMS Recovery utility, the Image Copy utility, or /DBRC processing, the identified database data set is not in the RECON data set.
- A `LIST` command was issued, but a database data set or DEDB AREA specified on the command, or belonging to the group specified on the command, is not defined in the RECON data set.

System Action: In the first case, this command failed, and subsequent commands were not processed. In the second and third cases, normal processing continues.

Programmer Response: For the first case, correct the command so it identifies a database data set that is identified to the RECON data sets or initialize the database data set in the RECON data set. Then reissue the command that failed and any other commands that were not processed. For the second and third cases, no response is required.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0110I UNABLE TO OPEN ddname DATA SET

Explanation: An attempt to open a non-VSAM data set failed. The ddname field identifies the DD statement that described the data set that could not be opened.

System Action: Processing of this utility was terminated.

Programmer Response: Determine the reason for the OPEN failure, correct the problem, and rerun the failing utility.

Problem Determination: 1, 2, 3, 8

DSP0111I DATA BASE DATA SET NOT DEFINED IN RECON DBDNAME=dbdname DDNAME=ddname DSNAME=dsname

Explanation: During execution of the IMS Recovery utility and the Image Copy utility, the identified database data set is not in the RECON data set.

System Action: Processing continues.

Programmer Response: None required.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0112I VOLSER volser SPECIFIED FOR newvol ALREADY EXISTS IN LOG RECORD

Explanation: The CHANGE.PRILOG or the CHANGE.SECLOG command was issued with the NEWVOL parameter, and the specified volume serial number was found in the PRILOG or SECLOG record.

System Action: The command failed, and subsequent commands are not processed.

Programmer Response: Correct the volume serial number and reissue the command.

Problem Determination: 2, 3, 8, and a listing of the RECON data sets.

DSP0113I record type RECORD NOT FOUND IN RECON DBDNAME=dbdname DDNAME=ddname TIME=time-stamp

Explanation: The request to access or change a record in the RECON data set failed because a record with the specified attributes was not found.

The identified record type can be ALLOC, IMAGE, REORG, or RECOV. The DBDNAME and DDNAME fields identify the data set in the request. The TIME field identifies the time stamp of the record in the request.

System Action: The request to access or change a record in the RECON data set failed.

Programmer Response: Correct the attributes that identify the record, and reissue the command that failed.

DSP0114I CHANGE ACCUMULATION RECORD NOT FOUND IN RECON CAGRP=name RECORD TIME=time-stamp

Explanation: The request to access or update a change-accumulation-execution record in the RECON data sets failed because a record with the specified attributes cannot be found. The name identifies the change-accumulation group, and time-stamp identifies the record time stamp.

System Action: The requested access or update of the RECON data sets could not be accomplished.

Programmer Response: Correct the attributes that identify the record, and reissue the command.

Problem Determination: 2, 3, and listings of the RECON data sets.

DSP0115I record-type RECORD NOT FOUND IN RECON RECORD TIME=time-stamp

Explanation: The request to access or change a record in the RECON data sets failed because a record with the specified attributes could not be found.

System Action: The request to access or change a record in the RECON data set failed.

Programmer Response: Correct the attributes that identify the record and reissue the command that failed. This message can also occur as an informational message during DELETE.ALLOC command processing, if the corresponding LOGALL record is not found and the allocation record was deleted.

Problem Determination: 2, 3, and listings of the RECON data sets.

DSP0116I RECON DATA SETS TO BE INITIALIZED ARE NOT EMPTY

Explanation: An INIT.RECON command was issued for a RECON data set that is already initialized.

System Action: The INIT.RECON command failed, and subsequent commands were not processed.

Programmer Response: Change the INIT.RECON command to specify an empty RECON data set. It might be helpful to list the contents of the data set that was specified to determine if it can be used. Then reissue the command, and any others that were not processed.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0117I DATA BASE DATA SET ALREADY DEFINED TO RECON DBDNAME=dbdname DDNAME=ddname

Explanation: An INIT.DBDS command specified a database data set that was already identified in the RECON data set. The dbdname and ddname fields identify the database data set.

System Action: The command failed, and subsequent commands were not processed.

Programmer Response: Determine why the command specified a previously initialized database data set. Correct and reissue the command, if appropriate.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0118I CHANGE ACCUMULATION GROUP ALREADY DEFINED TO RECON CAGRP=name

Explanation: An INIT.CAGRP command specified a change-accumulation group name that was already identified in the RECON data sets.

System Action: The command failed, and subsequent commands were not processed.

Programmer Response: Determine why the command specified a previously initialized change-accumulation group. Correct and reissue the

command if appropriate, and reissue any other commands that were not processed.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0119I RECORD WITH SAME TIME-STAMP ALREADY EXISTS IN RECON record

Explanation: A command to add a record to the RECON data set specifies a time stamp that already exists for a record of the same type. The record field identifies the record with the duplicate time stamp.

System Action: The command failed, and subsequent commands were not processed. No changes were made in the RECON data sets.

Programmer Response: Determine if the failed command is being used to add to the RECON data set a record that is truly a duplicate, or if it is being used to add a record of a separate event. In the second case, the time stamp must be unique. Correct the time stamp before reissuing the command that failed.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0120I NEW DDNAME ALREADY EXISTS IN RECON DBDNAME=dbdname DDNAME=ddname

Explanation: A command to change in the RECON data sets the DDNAME of a database data set failed because a database data set with the same DBDNAME and DDNAME already exists in the RECON data sets. The dbdname and ddname fields identify the database data set.

System Action: This command failed, and subsequent commands were not processed.

Programmer Response: Determine if the new DDNAME in command was incorrect. If it was, correct it, and reissue the command that failed, and any other commands that were not processed.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0121I DATA BASE DATA SET NOT DEFINED IN DBD LIBRARY DBDNAME=dbdname DDNAME=ddname

Explanation: A command was issued either to (1) identify a database data set in the RECON data sets, or (2) change the organization or ddname of a database data set that is already identified in the RECON data sets. The IMS DBD library contains no record of this database data set.

System Action: A record of the database data set was not added to or changed in the RECON data sets.

Programmer Response: Correct the identification of the database data set and reissue the command that failed.

Problem Determination: 2, 3. See the listing of the IMS DBD library.

DSP0122I NO PREDEFINED CHANGE ACCUMULATION DATA SETS REMAINING CAGRP=name

Explanation: No empty change-accumulation data sets remain for the identified change-accumulation group name. The maximum number of change-accumulation data sets to be maintained for this group has not yet been reached. (This would permit the reuse of existing change-accumulation data sets in the group.) The current execution of the Change Accumulation utility was successful, and it used the last remaining predefined change-accumulation data set for the identified change-accumulation group. A subsequent Change Accumulation utility request will fail unless (1) additional change-accumulation data sets for the identified change-accumulation group are predefined, or (2) the GRPMAX value for the identified change-accumulation group is changed to permit the reuse of change-accumulation data sets during the next execution of the Change Accumulation utility.

System Action: Processing by the Change Accumulation utility continued.

Programmer Response: Issue an `INIT.CA` command to define a new change-accumulation data set for the identified change-accumulation group, or issue a `CHANGE.CAGRP` command to change the GRPMAX value.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0123I NO PREDEFINED IMAGE COPY DATA SETS REMAINING DBDNAME=dbdname DDNAME=ddname

Explanation: No empty image copy data sets remain for the identified database data set or area data set. The maximum number of recovery generations to be maintained for this database data set or area data set has not yet been reached. (This would allow the reuse of existing image copy data sets.) The current execution of the Image Copy utility was successful, and it used the last remaining predefined image copy data set.

A subsequent execution of the Image Copy utility will fail unless:

- Additional image copy data sets for the identified database data set or area data set are predefined, or
- The GENMAX value for the identified database data set or area data set is changed to permit the reuse of image copy data sets during the next execution of the Image Copy utility.

System Action: Processing by the Image Copy utility continues.

Programmer Response: Issue an INIT.IC command to define a new image copy data set for the identified database data set or area data set, or issue a CHANGE.DBDS command to change the GENMAX value.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0124I DSNAME IS NOT UNIQUE WITHIN ADS DBD=dbd name AREA= area name ADSN=ADS DSN name

Explanation: During DBRC command processing (that is, CHANGE.ADS or INIT.ADS), the specified data set name was already registered in the RECON data set.

System Action: The command failed, and subsequent commands were not processed.

Programmer Response: Determine why the command specified a previously initialized data set name. Correct and reissue the command, if appropriate.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0125I CHANGE ACCUMULATION GROUP NOT DEFINED IN RECON CAGRP=grpname

Explanation: A request for information about the identified change-accumulation group failed because there is no record of the specified group in the RECON data set.

System Action: This command failed and subsequent commands were not processed.

Programmer Response: Correct the command that failed so that it identifies a change-accumulation group that is identified in the RECON data set. Reissue the command and any others that were not processed.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0126I NUMBER OF INACTIVE PRILOG RECORDS DELETED WAS nnnnn

Explanation: This message identifies the number of inactive PRILOG records that were deleted by a DELETE.LOG command. For each PRILOG deleted, any corresponding SECLOG, PRISLDS, and SECSLDS records were also deleted.

System Action: Processing by the DELETE.LOG command continued.

Programmer Response: None required. If the number of inactive log data sets that were deleted is large, the DELETE.LOG command might need to be executed more frequently.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0127I NO LOG DATA SETS DEFINED IN RECON

Explanation: A LIST.LOG command or a LIST.RECON command was used to request a listing of all log data sets identified in the RECON data sets; however, no log-data-set records were found.

System Action: Processing of the command continued.

Programmer Response: None.

Problem Determination: Listings of the RECON data sets.

DSP0128I NO CHANGE ACCUMULATION GROUPS DEFINED IN RECON

Explanation: A LIST.CAGRP command or a LIST.RECON command was used to request a listing of all change-accumulation groups defined in the RECON data sets; however, no change-accumulation-group records were found.

System Action: Processing of the command continued.

Programmer Response: None.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0129I INSUFFICIENT MAXIMUM RECORD SIZE FOR RECON DATA SET

Explanation: At least one of the data sets to be initialized as a RECON data set was created with a maximum record or CI size that is insufficient for the data set to be used as a RECON data set.

System Action: The INIT.RECON command failed, and subsequent commands were not processed. The RECON data sets were not initialized.

Programmer Response: Recreate the data sets to be initialized as RECON data sets with maximum record size, CI size, or both sufficient for RECON processing. For an explanation on how to create a RECON data set, see *IMS Version 9: Installation Volume 1: Installation Verification*.

Problem Determination: 2, 3, 8

DSP0130I IMAGE COPY DATA SET NAMES NOT UNIQUE

Explanation: A command to add or change the record of an image copy data set in the RECON data sets specified an existing data set name.

System Action: The command failed, and subsequent

commands were not processed.

Programmer Response: Make the data set name of the image copy data set unique. Reissue the failed command, and any other commands that were not processed.

Problem Determination: 2, 3, 8

DSP0131I DUPLICATE MEMBERS IDENTIFIED FOR CHANGE ACCUMULATION GROUP DBDNAME=dbdname DDNAME=ddname

Explanation: Duplicate database data set names have been specified as members for the change-accumulation group being initialized by an `INIT.CAGRP` command. The duplicate database name and data set ddname are identified in the message.

Programmer Response: Make sure that all database data sets have unique names in the `INIT.CAGRP` command. Reissue the command and any other commands that were not processed.

Problem Determination: 2, 3, 8

DSP0132I IMAGE COPY NEEDED FOR DBD=*dbd* DDN=*ddn*

Explanation: An HD reload operation completed or an application just loaded a database (PROCOPT=L|LS). An image copy should be taken before applications are scheduled to use the database data set or area data set.

System Action: None.

Programmer Response: Schedule an image copy operation before scheduling application use of the identified database data set or area data set.

Problem Determination: None.

DSP0133I PRILOG IS ASSOCIATED WITH AN ACTIVE SUBSYSTEM RECORD TIME=YY.DDD HH.MM.SS.T SSIDNAME=ssidname

Explanation: This message indicates that a `DELETE.LOG` command identified a PRILOG or SECLOG record with any of the following possibilities:

- PRILOG or SECLOG record was less than or equal to 24 hours old
- There were no active allocation records
- PRILOG or SECLOG is associated with a subsystem record

System Action: Processing by `DELETE.LOG` command continues with return code= X'04'.

Programmer Response: None required.

Problem Determination: 2, 3, 8 and listings of the RECON data sets.

DSP0134I DATA BASE DATA SET HAS BEEN UPDATED SINCE HISAM UNLOAD DBDNAME=dbdname DDNAME=ddname STARTIME=unload time

Explanation: An allocation record indicated that the identified database data set was updated after the HISAM unload operation completed but before the reload operation was executed.

System Action: The HISAM reload operation failed.

Programmer Response: If the changes to the database data set are to be kept, rerun the HISAM unload and reload operation. If the database data set changes are to be backed out, use the `DELETE.ALLOC` command and rerun the HISAM reload utility.

DSP0135I LOG RECORD(S) COMPRESSED, RECORD TIME=time-stamp

Explanation: While executing the `DELETE.LOG INACTIVE` command, the `NOTIFY.PRILOG RLDS` command, the IMS Log Archive utility, or the batch logging utility, DBRC determined that there were inactive data set entries in the identified PRILOG and deleted them, compressing the PRILOG. The corresponding entries in the SECLOG, PRISLDS, and SECSLDS, if applicable, were also compressed. Inactive data set entries are those older than the oldest log required for recovery.

System Action: Processing continues.

DSP0136I MAXIMUM NUMBER OF CHANGE ACCUMULATION DATA SETS ALREADY DEFINED CAGRP=cagrpname

Explanation: An `INIT.CA` command was issued to predefine a change-accumulation data set in the RECON data sets for a change-accumulation group for which the maximum number of change-accumulation data sets has already been defined. The message identifies the change-accumulation group.

System Action: The `INIT.CA` command failed, and subsequent commands were not processed.

Programmer Response: If additional change-accumulation data sets for the identified change-accumulation group are to be defined, use a `CHANGE.CAGRP` command to increase the maximum number of change-accumulation data sets maintained in the RECON data sets. Reissue the `INIT.CA` command and any others that were not processed.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0137I parameter 1 IS INCONSISTENT WITH PREDEFINED VOLUME INFORMATION

Explanation: The volume information specified in the identified parameter of a NOTIFY.IC or NOTIFY.CA command does not agree with volume information in the record in the RECON data sets of the image copy or change-accumulation data set that is related to the command. The volume information in the RECON data sets must be the same as or be a subset of that specified in a NOTIFY.IC command. The volume information in the RECON data sets must be the same as that specified in a NOTIFY.CA command.

System Action: The NOTIFY.IC or NOTIFY.CA command failed, and subsequent commands were not processed.

Programmer Response: Change the volume information in either the RECON data sets or the command that failed. Then reissue the command, and any others that were not processed.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0138I parameter1 TIME-STAMP IS NOT GREATER THAN parameter2 TIME-STAMP

Explanation: In the command or function being executed, parameter1 must specify a time stamp that is later than the time stamp in parameter2.

For the NOTIFY PRI/SEC LOG switch call (closing the existing entry and opening a new OLDS entry at the same time), parameter1 (insert run time) refers to the time stamp of the OLDS to be closed, and parameter2 (insert start time) refers to the existing OLDS entry start-time time stamp.

If the command is NOTIFY.CA and the specified time stamps are correct, then parameter1 refers to the specified run time, and parameter2 refers to an existing CA's stop time.

For the End HSSP image copy processing, parameter1 refers to the stop time of the HSSP image copy, and parameter2 refers to the start time.

For the DASD logging switch exit, parameter1 refers to the close time and parameter2 refers to the start time of the current OLDS.

For the DASD logging close exit, parameter1 refers to the close time, and parameter2 refers to the start time of the OLDS to be closed.

System Action: The command failed, and subsequent commands are not processed.

Programmer Response: Correct the time stamps; then reissue the failing command and any others that were not processed.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0139I RECON ALREADY INFORMED OF DEALLOCATION

Explanation: A NOTIFY.ALLOC command was issued to add to the RECON data sets a record of the deallocation of a database data set. The corresponding allocation record already contains the deallocation information.

System Action: The NOTIFY.ALLOC command failed, and subsequent commands were not processed.

Programmer Response: Determine if the NOTIFY.ALLOC command correctly identified the database data set and the deallocation time stamp. If so, correct the RECON data sets by deleting from it the existing allocation record and issuing a NOTIFY.ALLOC command to add to the RECON data sets the correct allocation and deallocation information.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0140I REQUIRED parameter PARAMETER NOT SPECIFIED

Explanation: A command was not processed because the identified parameter was not specified.

System Action: The command failed, and subsequent commands were not processed.

Programmer Response: Add the missing parameter. Then issue the command and any others that were not processed.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0141I parameter PARAMETER SHOULD NOT BE SPECIFIED

Explanation: A command could not be processed because the identified parameter was specified. The identified parameter is either not valid with the command, or not consistent with the existing information in RECON.

System Action: The command failed and subsequent commands were not processed.

Programmer Response: Delete the indicated parameter. Then reissue the command and any others that were not processed.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0142I REQUIRED parameter PARAMETER NOT SPECIFIED

Explanation: A command could not be processed because the identified parameter was not specified in the command.

System Action: Processing is terminated. The RECON data sets are not updated, and subsequent commands are not processed.

Programmer Response: Determine the correct parameters to specify.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0143I parameter PARAMETER SHOULD NOT BE SPECIFIED

Explanation: A command could not be processed because the identified parameter was specified. The identified parameter is either not valid with the command, or not consistent with the existing information in the RECON data sets.

System Action: The NOTIFY.PRILOG or NOTIFY.SECLOG command failed, and subsequent commands were not processed.

Programmer Response: Delete the indicated parameter or determine the correct parameters to specify. Then reissue the command, and any others that were not processed.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0144I parameter PARAMETER INCONSISTENT WITH RECON INFORMATION

Explanation: The CFSTR2 parameter was entered for a CHANGE.DBDS command. If the area has been defined with the MAS parameter, CFSTR2 cannot be defined. The MAS parameter specifies that the area resides in a multi-area structure (MAS). For these structures, IMS duplexing is not supported.

- The CFSTR2 parameter was specified in the CHANGE.DBDS command for an area with a CFSTR1 that is already defined in RECON as a MAS.
- The ICDSN2 parameter cannot be specified in a DELETE.IC command if no duplicate image copy data set information exists in the image copy record.
- The VOLLIST2, INVALID2, VALID2, FILESEQ2, or UNIT2 parameters cannot be specified in a CHANGE.IC command if no duplicate image copy data set information exists in the image record, and the ICDSN2 parameter was not specified in the CHANGE.IC command to add information about a duplicate image copy data set.
- The SSID parameter was specified with the STARTIME parameter in the LIST.LOG command. The SSID specified did not match the SSID in the log record with the specified STARTIME.
- The INVALID or VALID parameters cannot be specified for any command to change an available, unused record in the RECON data sets.
- The REUSE attribute cannot be specified for a CHANGE.DBDS command when a nonstandard image copy data set is associated with that database data set.
- The STARTIME specified for a NOTIFY.PRILOG OLDS command is within the time bounds of an existing online log data set identified in the RECON data set for the specified subsystem ID. This is not allowed.
- The STOPTIME specified for a NOTIFY.PRILOG OLDS command is within the time bounds of an existing online log data set identified in the RECON data set for the specified subsystem ID. This is not allowed.
- The number of PURGLIST items specified in the NOTIFY command is greater than the number of database data sets defined (as group members) in the change accumulation (CAGROUP) record. This is not allowed.
- The ADDDB|DELDB parameters cannot be specified in the CHANGE.DBDSGRP command when changing members in a DBDS Group.
- The ADDMEM|DELMEM parameters cannot be specified in the CHANGE.DBDSGRP command when changing members in a DB Group.
- The CHANGE.SG command was issued with the NORTA parameter, but either no remote takeover processing had been requested or actions have been taken (by the operator) so that you cannot reverse the takeover. Once you start the new active or new tracker or start a batch backout job after the /RTAKEOVER command has completed, you cannot reverse the remote takeover without first reinstalling the tracking subsystem databases.
- The NOICREQ parameter was specified in a CHANGE.DB command for a recoverable database.

System Action: The command is rejected.

System Programmer Response: If the area is defined with the MAS parameter indicating that it resides in a multi-area structure, remove the CFSTR2 parameter from the CHANGE.DBDS command. If the area is to reside in a single—area structure with IMS duplexing (CFSTR1 & CFSTR2 defined), remove the MAS keyword.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0145I RECON ALREADY INFORMED OF LOG DATA SET CLOSE

Explanation: A NOTIFY.PRILOG or NOTIFY.SECLOG command was issued to add to the RECON data sets information about the closing of a log data set. The record of the log data set in the RECON data sets

already has a nonzero time stamp for its closing, indicating that this information has already been entered.

System Action: The NOTIFY.PRILOG or NOTIFY.SECLOG command failed, and subsequent commands were not processed.

Programmer Response: Determine if the command correctly identified the log data set and the time stamp of its closing. Make any necessary changes to the command. If the command was correct, and the information in the RECON data set is incorrect, use a CHANGE.PRILOG or CHANGE.SECLOG command to correct the record. Then reissue the command, and any others that were not processed.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0146I MORE THAN 255 VOLUMES SPECIFIED FOR LOG DATA SET

Explanation: A NOTIFY.PRILOG or NOTIFY.SECLOG command was used to define additional volumes for a log data set. The total number of volumes exceeds the allowable maximum of 255.

System Action: The NOTIFY.PRILOG or NOTIFY.SECLOG command failed, and subsequent commands were not processed.

Programmer Response: Change the volume information in either the RECON data sets or the command that failed. Then reissue the command, and any others that were not processed.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0147I RECOVERY TO timestamp IS NOT VALID

Explanation: A NOTIFY.RECOV command was issued to add information about a recovery of a database data set to the RECON data sets. The RCVTIME value specified in the command and listed in the message is not valid according to information in the RECON data sets. This value must be a time when the DBDS or area was not being updated; that is, a time that is not covered by an active ALLOC record in the RECON and might not fall within the range of an existing time-stamp recovery.

System Action: The NOTIFY.RECOV command failed, and subsequent commands were not processed.

Programmer Response: Correct the RCVTIME value specified in the NOTIFY.RECOV command and reissue the command along with any other commands that were not processed.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0148I parameter TIME-STAMP IS NOT GREATER THAN LAST VOLUME STOPTIME

Explanation: A NOTIFY.PRILOG, NOTIFY.SECLOG, CHANGE.PRILOG or CHANGE.SECLOG command was issued to add or change the stop time of a log data set in the RECON data sets. The time stamp in the command is not greater than the time stamp already recorded in the RECON data sets for the log data set.

System Action: The command failed, and subsequent commands were not processed.

Programmer Response: Correct the time stamp in the command. Then reissue the command, and any others that were not processed.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0149I USER IMAGE COPY OR REORG NOTIFICATIONS NOT VALID WITH REUSE ATTRIBUTE DBDNAME=name DDNAME=name

Explanation: A NOTIFY.UIC or NOTIFY.REORG command was issued for the identified database data set or area data set. The command did not complete because the identified database data set or area data set is defined in the RECON data sets with the REUSE attribute.

If a NOTIFY.REORG command was issued, a REORG record was written, but the Image Copy record was not created.

System Action: The NOTIFY.UIC or NOTIFY.REORG command did not complete. For the NOTIFY REORG command, only the REORG record was created; the IC record was not.

Programmer Response: Only database image copy data sets created by the DataBase Image Copy utility or the Online Image Copy utility can be recorded in the RECON data set for database data sets or area data sets with the REUSE attribute. If the database data set or area data set is no longer to have this attribute, change it with a CHANGE.DBDS command. That would allow addition of information to the RECON data sets about nonstandard image copy data sets for the identified database data set or area data set. Then reissue the command, and any others that were not processed.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0150I DATA SET IDENTIFIER IN DBDLIB AND RECON DO NOT MATCH DBDNAME=name DDNAME=name

Explanation: A NOTIFY.REORG, CHANGE.DBDS, or INIT.DBDS command was used to determine that the data set identifier in the IMS DBD library no longer

matches the data set identifier in the RECON data set. The database data set or area data set for which the command was issued is identified in the message.

System Action: The NOTIFY.REORG, CHANGE.DBDS, or INIT.DBDS command failed, and subsequent commands were not processed.

The INIT.DBDS command reports all DBDS or AREA records that no longer match the RECON.

Programmer Response: The latest DBDGEN has re-sequenced the database in the DBDLIB. Because the data set identifier has been changed, all image copy data sets, change-accumulation data sets, and database changes recorded on logs are no longer valid for use in recovering the identified database data set or area data set.

Rerun the DBDGEN after changing the cause of the re-sequencing. Otherwise, you must delete and reinitialize all of the identified database data sets or area data sets in the RECON using the INIT.DBDS command, and take new image copies.

Problem Determination: 2, 3, 8, and a listing of the RECON data set.

DSP0151I DATA BASE OR DATA SET ORGANIZATION HAS CHANGED

Explanation: A NOTIFY.REORG or CHANGE.DBDS command has been processed. The database organization of a database data set, or its data set organization, has been changed over that previously recorded in the RECON data sets.

System Action: If the command was NOTIFY.REORG, processing continued; if the command was CHANGE.DBDS, processing was terminated. If the organization of the database or of the database data set has changed, use a NOTIFY.REORG command to add this information to the RECON data sets before reissuing the CHANGE.DBDS command that failed.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0152I IMAGE COPY NOTIFICATIONS NOT VALID FOR DATA BASE ORGANIZATION DBDNAME=name DDNAME=name

Explanation: A NOTIFY.REORG command specifying an image copy data set could not be processed because the corresponding database is not a HISAM database; therefore the image copy data set is not usable by the DataBase Recovery utility.

System Action: The NOTIFY.REORG command failed, and subsequent commands were not processed.

Programmer Response: Remove from the NOTIFY.REORG command the information about the image copy data set. Then reissue the command, and any others that were not processed.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0153A DEALLOCATION EXIT FAILED FOR DBDNAME=*dbdname* DDNAME=*ddname* ALLOCATION *timestamp1* DEALLOCATION *timestamp2*

Explanation: The request to record the deallocation for *timestamp2* failed. If *timestamp1* or *timestamp2* does not print, the time stamp was invalid.

System Action: Further authorization to the database is prohibited. Message DSP0300I is issued and identifies the error that was found:

- No ALLOC record
- ALLOC already deallocated

For information on these errors, see message DSP0300I.

System Operator Response: Review the information in RECON to determine why the deallocation exit failure occurred. Take appropriate actions to ensure recoverability of the database by taking one of the following actions:

- Take an image copy of the database or area.
- Record the allocation record in RECON by issuing NOTIFY.ALLOC command.

Issue the CHANGE.DB AUTH command to allow access to the database or area when appropriate.

If this appears to be a logical error within DBRC, contact the IBM Support Center.

Problem Determination: 2, 3, 35, and listing of RECON

DSP0154I SPECIFIED IMAGE RECORD IS USER IMAGE COPY

Explanation: A DELETE.IC or CHANGE.IC command failed because the image copy record specified in the command identifies a nonstandard image copy data set.

System Action: The DELETE.IC or CHANGE.IC command failed, and subsequent commands were not processed.

Programmer Response: If the record of the nonstandard image copy data set is correct in the RECON data sets, use a DELETE.UIC or a CHANGE.UIC command to delete or change the record, respectively. Then reissue any other commands that were not processed.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0155I SPECIFIED IMAGE RECORD IS STANDARD IMAGE COPY

Explanation: A DELETE.UIC or CHANGE.UIC command failed because the image copy record specified in the command identifies an image copy data set that was created by the Image Copy utility or the Online Image Copy utility (a standard image copy data set).

System Action: The DELETE.UIC or CHANGE.UIC command failed, and subsequent commands were not processed.

Programmer Response: If the record of the standard image copy data set is correct in the RECON data sets, use a DELETE.IC or a CHANGE.IC command to delete or change the record, respectively. Then reissue any other commands that were not processed.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0156I NO ACTIVE ALLOCATIONS TO BE DELETED

Explanation: A DELETE.ALLOC command failed because either no active allocations of the database data set specified in the command were found in the corresponding LOGALL record, or the corresponding PRILOG record is not closed in the RECON data sets.

System Action: The DELETE.ALLOC command failed, and subsequent commands were not processed.

Programmer Response: Determine if the DELETE.ALLOC command correctly identified the allocation to be deleted. If not, correct the command. Then reissue the command, and any others that were not processed.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0157I IMAGE COPY DATA SET NAME INCONSISTENT WITH RECON INFORMATION

Explanation: A DELETE.IC command was issued to delete information about a duplicate image copy data set from a specified image copy record in the RECON data sets. The command failed because the name specified in the ICDSN2 parameter of the command did not match the name of the duplicate image copy data set in the identified record of the RECON data sets.

System Action: The DELETE.IC command failed, and subsequent commands were not processed.

Programmer Response: Correct the name specified in the ICDSN2 parameter of the DELETE.IC command. Then reissue the command, and any others that were not processed.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0158I MEMBER OF CHANGE ACCUMULATION GROUP NOT FOUND IN RECON DBDNAME=name DDNAME=name

Explanation: A DELETE.CAGRP command failed. The database data set or area data set identified in the message was a member of the CAGRP being deleted, but no header record for the database data set or area data set was found in the RECON data set. This indicates an inconsistency in the RECON data sets.

System Action: The DELETE.CAGRP command failed, and subsequent commands were not processed.

Programmer Response: Obtain a listing of the RECON data set to determine the location and extent of the inconsistency. If the identified database data set or area data set had been deleted from the RECON data set, the corresponding entry in the CAGRP record should also have been reset to binary zeros. Correct the inconsistencies in the RECON data set. Then reissue the command that failed, and any others that were not processed.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0159I DATA BASE DATA SET NOT DEFINED IN CHANGE ACCUMULATION GROUP DBDNAME=name DDNAME=name

Explanation: A DELETE.CAGRP command failed. The header record of the database data set or area data set identified in the message indicates that it is not a member of the change-accumulation group for which the DELETE.CAGRP command was issued. However, the record of the change-accumulation group lists the identified database data set or area data set among its members. This indicates an inconsistency in the RECON data set.

System Action: The DELETE.CAGRP command failed and subsequent commands were not processed.

Programmer Response: Using a listing of the RECON data set, identify the inconsistency. Correct the inconsistency in the RECON data set. Then reissue the command, and any others that were not processed.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0160I parameter TIME-STAMP IS INCONSISTENT WITH RECON INFORMATION

Explanation: The identified parameter of a CHANGE.PRILOG or CHANGE.SECLOG command specifies a time stamp for the last volume of a log data set that is not equal to its equivalent in the RECON data sets.

System Action: The CHANGE.PRILOG or CHANGE.SECLOG

command failed, and subsequent commands were not processed.

Programmer Response: Correct the time stamp of the identified parameter. Then reissue the command, and any others that were not processed.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0161I VOLLIST AND RUNTIMES LISTS DO NOT CONTAIN THE SAME NUMBER OF ENTRIES

Explanation: A CHANGE.PRILOG or CHANGE.SECLOG command failed because VOLLIST and RUNTIMES parameters do not contain the same number of entries.

System Action: The CHANGE.PRILOG or CHANGE.SECLOG command failed, and subsequent commands were not processed.

Programmer Response: Correct the parameters of the command. Then reissue the command, and any others that were not processed.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0162I LOG DATA SET VOLUME INFORMATION CANNOT BE CHANGED

Explanation: A CHANGE.PRILOG or CHANGE.SECLOG command to change information in the RECON data sets about a log data set failed because the log data set is not closed. The VOLLIST and RUNTIMES parameters can be specified only for a log data set that has a stop time of nonzero, indicating that it is closed.

System Action: The CHANGE.PRILOG or CHANGE.SECLOG command failed, and subsequent commands were not processed.

Programmer Response: Wait until the closing of the log data set has been recorded in the RECON data sets before reissuing the failing command (and any others that were not processed).

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0164I ONLY ONE CHECKPOINT COUNT VALUE CAN BE SPECIFIED FOR A TRACKING LOG RECORD.

Explanation: A CHANGE command was issued to change the checkpoint count value, but more than one value was specified.

System Action: The command fails and subsequent commands are not processed.

Programmer Response: Reissue the command with only one checkpoint count value specified.

Module: DSPURM35, DSPURM40

DSP0165I DATA BASE RECORD NOT FOUND IN RECON DBD=*database name*

Explanation: A LIST.DB or LIST.HISTORY command was issued for a nonexistent database record. If the database identified is a partition of a HALDB, a RECON inconsistency has been encountered.

System Action: If this error occurs while listing a HALDB, DBRC processing terminates. Otherwise, processing continues.

Programmer Response: If this error occurs while listing a HALDB, contact the IBM Support Center for assistance. Otherwise, determine if the database name was misspelled in the command. Reissue the command that failed and any other commands that were not processed.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0166I BACKOUT RECORD NOT FOUND IN RECON SSID=subsystem name

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DSP0166I SUBSYSTEM RECORD NOT FOUND IN RECON SSID=subsystem name

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DSP0166I SUBSYSTEM RECORD WAS FOUND IN RECON SSID=subsystem name

Explanation: A CHANGE, DELETE, or LIST backout (BKOUT) or subsystem (SUBSYS) command was issued for a nonexistent subsystem name. A NOTIFY.BKOUT command might have been issued for an existing subsystem name.

System Action: Processing is terminated. The RECON data sets are not updated. Subsequent commands are not processed.

Programmer Response: Determine if a misspelling has occurred. Then issue again the command that failed, and any other commands that were not processed.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0167I IRLMID irlmid NOT FOUND IN ANY SUBSYSTEM RECORDS

Explanation: During a CHANGE.SUBSYS command, it was discovered that the specified IRLMID was not found in any subsystem record. This is an error.

System Action: Processing is terminated. The RECON data sets are not updated.

Programmer Response: Determine if the IRLMID has been misspelled or if the specified IRLMID has no outstanding subsystem records. If the IRLMID has been

misspelled, correct the spelling and submit the command again.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0168I BATCH BACKOUT IS NEEDED FOR SUBSYSTEM SSID=ssid

Explanation: The subsystem record in RECON was marked abnormally terminated as a result of the `CHANGE.SUBSYS ABNORMAL` command. The message is issued for two reasons: (1) the subsystem had updated databases; the failed subsystem could have caused some databases to need backout, or (2) the subsystem was a batch subsystem using the IRLM, and it had not updated a database. The Backout utility should be run to clean up the IRLM locks.

System Action: The command was successful.

Programmer Response: Execute the IMS Backout utility.

DSP0169I BATCH BACKOUT IS NOT NEEDED FOR SUBSYSTEM SSID=subsystem name

Explanation: The subsystem record in RECON was deleted during the execution of `CHANGE.SUBSYS ABNORMAL`; batch backout does not need to be run. The subsystem record was deleted because the subsystem had not updated a database. All databases authorized by the subsystem were unauthorized.

System Action: The command was successful.

User Response: None.

Problem Determination: None.

DSP0170I NO DATA BASE RECORDS FOUND IN RECON

Explanation: A `LIST.DB` command was issued and no database records exist in the RECON data set.

System Action: Processing is continued.

User Response: None.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0171I ABNORMAL AND (STARTRCV|ENDRECOV) SHOULD NOT BE SPECIFIED TOGETHER

Explanation: During a `CHANGE.SUBSYS` command, it was discovered that the ABNORMAL parameter was specified with the STARTRCV or ENDRECOV parameters. This is an inconsistency.

System Action: Processing is terminated. The RECON data set is not updated.

User Response: Determine the correct parameter and submit the command again.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0172I NO SUBSYSTEM RECORDS FOUND IN RECON

Explanation: A `LIST.SUBSYS` command was issued and no subsystem records exist in the RECON data set.

System Action: Processing continues.

User Response: None.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0174I CORRESPONDING PRILOG RECORD NOT FOUND

Explanation: During the processing of a `LIST.HISTORY` command, an ALLOC record was found in the RECON data set without a corresponding PRILOG record. This indicates an inconsistency in the RECON data set. The ALLOC record without a corresponding PRILOG record is listed before this message.

System Action: Processing of the LIST request continues.

Programmer Response: Correct the inconsistency in the RECON data set.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0175I UNAUTHORIZATION PROCESSING WAS UNSUCCESSFUL DBD=*dbdname* **SSIDNAME=***subsystem name* **RC=***return code*

Explanation: The subsystem called DBRC to unauthorize the database, but DBRC encountered a problem preventing successful unauthorization. RC identifies the error return code. See “Return Codes from Unauthorization Call” on page 395 for the meaning of the return code.

For RC=24, DBRC tried to calculate a new held-authorization state and a valid state was not obtained. The subsystem was unauthorized, but the database record is marked in the RECON data set, so no other subsystem can be authorized to use the database. This is a program error in DBRC or IMS.

System Action: The unsuccessful return code is passed to the caller.

User Response: Gather information about the unauthorization process and contact the IBM Support Center. For RC=24, the database can be authorized again after all of the subsystems identified in the SSID list have unauthorized the database.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

Module: DSPSDBUA

DSP0177I NO type RECORDS DEFINED IN RECON

Explanation: As a result of a LIST command, no records of the type indicated in this message can be found in the RECON.

System Action: Processing continues.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0178I CORRESPONDING LOGALL NOT FOUND

Explanation: During the processing of a LIST.LOG or a LIST.RECON command, a PRILOG record was encountered in the RECON data set for which a corresponding LOGALL record was not found. This indicates an inconsistency in the RECON data set. The PRILOG record for which a corresponding LOGALL record was not found is listed preceding this message.

System Action: Processing of the LIST request continues.

User Response: Correct the inconsistency in the RECON data set.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0179I EXTRANEOUS record-type RECORD FOUND IN RECON

Explanation: The record (either LOGALL or SECLOG) identified in the message was found in the RECON data set, but a corresponding PRILOG record was not found. This indicates an inconsistency in the RECON data set. The extraneous record is listed following this message.

System Action: Processing of the LIST request continues.

User Response: Correct the inconsistency in the RECON data set.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0180I NUMBER OF RECORDS LISTED IS nnnnn

Explanation: This message specifies the total number of records listed by a LIST.LOG, LIST.CAGRP, LIST.DBDS or LIST.RECON command.

System Action: This command failed and subsequent commands were not processed.

User Response: Correct the command that failed so that it identifies a change-accumulation group that is identified in the RECON data set. Reissue the command and any others that were not processed.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0181I NO type RECORD FOUND

Explanation: While processing the LIST.HISTORY command, no records of the specified "type" were found for the database data set or DEDB AREA being listed. The possible record types are: available IC, available CA, IC, CA, ALLOC, MRGND, REORG, or RECOV.

System Action: None.

Programmer Response: None required.

DSP0182I EXTRANEOUS SECSLDS RECORD FOUND SSID= ssid TIME= time

Explanation: During the processing of a LIST.LOG command, a secondary system log data set (SLDS) record with the specified SSID and start time was found without a corresponding primary SLDS record. This indicates an inconsistency in the RECON data sets.

System Action: Processing continues.

Programmer Response: Correct the inconsistency in the RECON data sets.

Problem Determination: 2, 3, 8, and a listing of the RECON data sets.

DSP0183I NO record-type RECORD FOUND DBDNAME=dbdname DDNAME=ddname

Explanation: DBRC processing failed because the identified record type for this database data set could not be located.

System Action: DBRC processing terminates.

Programmer Response: Contact the IBM Support Center for assistance.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0184I USE OF THE INPUT LOG BY THIS RELEASE IS UNSUPPORTED

Explanation: This IMS release was unable to use the input log.

System Action: Processing is terminated.

Programmer Response: Process the input log with the IMS release that created it.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

Module: DSPARC00, DSPARC10, DSPLRC00, DSPLRC10, DSPUBK00

DSP0185I RECON RECORD LENGTH IS ZERO
record key

Explanation: An attempt to add or change a record in the RECON data sets failed because the passed length of the record image is zero.

Following message DSP0185, an additional line of output displays the formatted record key.

System Action: The record was not added or changed. Processing by the DBRC utility ended.

Programmer Response: Contact the IBM Support Center.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

Module: DSPARC00, DSPARC10, DSPLRC00, DSPLRC10, DSPUBK00

DSP0186I UNRECOGNIZABLE RECON RECORD TYPE record-key

Explanation: A record exists in the RECON data set that contains an unrecognizable record type. The key of this record is identified in the message.

System Action: Processing of the command continues.

User Response: Examine the unrecognizable record. An Access Method Services `PRINT` command can be used to obtain a hexadecimal listing of the record in question to determine if it is a true RECON record with an erroneous key that should be corrected, or if it is a totally unrecognizable record type. If unrecognizable, the record should be deleted from the RECON data set. The `REPRO` command of Access Method Services can be used to copy all records of the RECON data set except the unrecognizable record.

Problem Determination: 2, 3, 8, and listings of the RECON data set.

DSP0187I CAGRP= grpname AND ALL ASSOCIATED CA RECORDS ARE DELETED

Explanation: All members of the identified change accumulation group, the empty CAGRP record, and all associated CA execution records were deleted.

System Action: None.

Programmer Response: None required.

DSP0188I BACKOUT RECORD COMMAND FAILED- REASON nbr

Explanation: A `NOTIFY`, `CHANGE`, or `DELETE` backout (`BKOUT`) record command failed for one of the following reasons, where nbr is the reason number:

Reason Code (nbr)	Meaning
1	An invalid character was found in the UOR parameter. The characters must be hexadecimal in the range 0-9 or A-F.
2	Neither the DBD nor the BKO parameter was specified when a new UOR was added to the backout record. At least one is required.
3	The same database name was specified in both the DBD and BKO parameters. A database cannot require backout *and* have already been backed out.
4	None of the optional parameters for the `CHANGE.BKOUT` command were specified. The command must be directed to take some action.
5	The DELETE parameter was specified, but the UOR identified by the UOR and UORTIME parameters does not exist in the backout record identified by SSID.
6	At least one of the databases listed in the DELETE parameter does not exist in the identified UOR entry of the backout record involved.
7	An attempt was made to add or change the status of databases to that of databases requiring backout for a UOR that has backout processing completed. Only the databases marked as backed out (BKO parameter) and deleted (DELETE parameter) can be in this UOR. This error condition is included for integrity purposes. However, for a successful change, a valid change to the UOR is made using a `CHANGE.BKOUT` command, such as resetting the PSB to the current value. Then, reissue the command that failed. DBRC will accept the added or changed database to backout needed.
8	The `NOTIFY.BKOUT` command cannot be used to create a backout record for a subsystem (SSID) that is authorized

to any of the databases listed in the DBD or BKO parameter. This error might be the result of a misspelled SSID or database name.

System Action: Processing terminates. The RECON data sets are not updated, and subsequent commands are not processed.

User Response: Correct, remove, or include the parameters required. Then, reissue the backout command and any other commands that were not processed.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0189I GENJCL COMMAND REJECTED FOR USER-RECOVERABLE DATABASES DBD= *database name* **AREA=***area name*

Explanation: DBRC GENJCL command processing discovered that the GENJCL.RECOV command was specified with a user-recoverable database.

System Action: This command failed and subsequent commands were not processed.

Module: DSPJCMAI, DSPJCRCV

DSP0190I GENERATED UTILITY JCL:

Explanation: A listing of the job control language that was generated by a GENJCL command follows this informational message.

System Action: Processing continues.

User Response: None.

Problem Determination: 2, 3, 8, and listings of the RECON data set.

DSP0192I SAMEDS KEYWORD NOT VALID

Explanation: The SAMEDS keyword was specified as a subparameter of the GENJCL.IC command, but one of the following problems exists:

- The ONEJOB keyword was omitted.
- The group specified by the GROUP keyword has more than 255 members.

System Action: Command processing terminates and subsequent commands are ignored.

User Response: Reenter the command without the SAMEDS keyword.

Problem Determination: 2, 3

Module: DSPJCMAI, DSPJCIMG

DSP0193I parameter PARAMETER IS INCONSISTENT WITH REUSE ATTRIBUTE

Explanation: The database data set that was specified in a GENJCL.IC command or a GENJCL.OIC command, or the change-accumulation group specified in a GENJCL.CA command, is identified in the RECON data set with the REUSE attribute. The parameter identified in the message can be specified only for database data sets or change-accumulation groups that are identified in the RECON data set with the NOREUSE attribute.

System Action: The command (GENJCL.IC,GENJCL.OIC, or GENJCL.CA) failed, and subsequent commands were not processed.

User Response: Remove the identified parameter and reissue the failing command. Any other commands that were not processed can also be reissued.

Problem Determination: 2, 3, 8, and listings of the RECON data set.

DSP0194I OPERATION NOT ALLOWED FOR ILDS OR INDEX DATABASE DATA SETS DBD=*db name* **DDN=***dd name*

Explanation: The requested operation, command, or utility is attempting to run for an ILDS or Index data set of a HALDB. These data sets are not recoverable and therefore the operation is not allowed. For operations involving more than one DBDS, DBD and DDN identify the problem DBDS.

In the message text:

db name
Identifies the name of the HALDB that contains the problem database data set.

dd name
Identifies the DD name of the data set experiencing the problem.

System Action: The utility failed or the command failed and subsequent commands were not processed

Programmer Response: Determine if the operation correctly identified the DBDS. Make any necessary change and run the operation again

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0195I *keyword* **KEYWORD IS NOT ALLOWED FOR THIS DL/I PARTITIONED-DB RECORD DBDNAME=***db name*

Explanation: The specified keyword is either not applicable or not allowed for records that are associated with HALDBs.

For operations involving more than one database, *db*

name identifies the problem database.

System Action: If the command was for a specific database, the command failed and subsequent commands were not processed. A command involving more than one database results in a warning (RC=4). Subsequent commands are processed.

Programmer Response: Determine if the command correctly identified the record.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0197I ONLINE REORG NOTIFICATION NOT VALID FOR DATABASE ORGANIZATION

Explanation: A command to update the RECON regarding a HALDB OLR was issued for a database that is not the correct type. HALDB OLR is valid for HALDB PHDAM or PHIDAM databases only.

System Action: Processing is terminated. The command fails. Review the RECON contents and reissue the command appropriately.

Programmer Response: Contact the IBM Support Center if you require additional assistance.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0198I RECOVERY NOT ALLOWED DURING ONLINE REORGANIZATION

Explanation: Recovery when HALDB OLR is active is not allowed.

System Action: Processing is terminated. The command fails. Review the RECON contents and reissue the command appropriately.

Programmer Response: Contact the IBM Support Center if you require additional assistance.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0199I IMAGE COPY RUNTIME COINCIDES WITH ONLINE REORG EXECUTION

Explanation: A `NOTIFY` command to add an image copy was issued. HALDB OLR is active.

System Action: Processing is terminated. The command fails. Review the RECON contents.

Programmer Response: Contact the IBM Support Center if you require additional assistance.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0201I THE FOLLOWING REQUIRED PARAMETERS ARE MISSING: parameter1 parameter2 parameter3 parameter4 parameter5

Explanation: One or more of the identified parameters required for a command were not found. A common cause of this message is incorrect continuation of a command.

System Action: This command was not processed.

User Response: Reissue the command, specifying all required parameters, using the correct continuation for the command.

Problem Determination: 2, 3

DSP0202I INVALID PARAMETER: string

Explanation: The identified character string was found in a command where a parameter was expected. The character string does not match any valid parameter for the command being processed. The message identifies the first 20 characters of the input that was encountered and interprets the characters as a parameter.

The specified invalid parameter might be implied by other parameters and might not have been entered as part of the command. For example, entering a command for a group implies either a DDN(...) or AREA(...) parameter, which might be invalid for the command.

System Action: The command failed, and subsequent commands were not processed.

User Response: Reissue the command after correcting the error in its parameters.

Problem Determination: 2, 3

DSP0203I COMMAND COMPLETED WITH CONDITION CODE nn

Explanation: The command completed with the identified condition code.

System Action: None.

User Response: If the condition code is not 0, determine the cause of the error from other messages.

DSP0204I INVALID VALUE FOR PARAMETER *parameter*

Explanation: A value specified for a command parameter did not meet the requirements of the identified parameter.

Possible errors are:

- A numeric value is not within the allowed limits.
- The value contains a nonnumeric character.
- The opening parenthesis before the value is missing.

- A character string has an invalid length or contains an invalid character.

System Action: This command failed, and subsequent commands were not processed.

System Operator Response: Correct the parameter value and reissue the command.

Problem Determination: 2, 3

DSP0205I PARENTHESIS ERROR AFTER KEYWORD *keyword*

Explanation: There is a problem with the parentheses in a command:

- Too many parentheses delimit keyword values.
- Parentheses occur where not expected.
- Parentheses occur before an optional or required parameter (which might be missing).

The error was encountered after the specified keyword.

System Action: This command failed, and subsequent commands were not processed.

User Response: Correct the error and reissue the command. You can reissue any other commands that were not processed.

Problem Determination: 2, 3

DSP0206I INVALID COMMAND NAME string

Explanation: The identified character string was found where a verb.modifier was expected as the command. The character string does not match any valid command name. The message identifies the first 20 characters of the input that was encountered and interprets the characters as a parameter.

System Action: This command failed, and subsequent commands were not processed.

User Response: Correct the command-name and reissue the command. Any other commands that were not processed can also be reissued.

Problem Determination: 2, 3

DSP0207I INVALID APOSTROPHE AFTER KEYWORD *keyword*

Explanation: The identified special character was encountered in a command in a place where it was not expected. The error occurred after the specified keyword.

System Action: This command failed, and subsequent commands were not processed.

User Response: Correct the invalid character and reissue the command. You can reissue any other commands that were not processed.

Problem Determination: 2, 3

DSP0208I END OF COMMENT DELIMITER MISSING - ONE IS ASSUMED

Explanation: The */ delimiter, which specifies the end of a comment in a command line, was not encountered before the end of the command line, and the continuation delimiter (to continue the line) was not specified.

System Action: A */ delimiter was assumed at the end of the input line. Processing of the command continued.

User Response: Correct the command if the assumed */ delimiter caused other problems.

Problem Determination: 2, 3

DSP0209I PROCESSING TERMINATED WITH CONDITION CODE = *nn*

Explanation: Because of errors described in preceding error messages, processing of commands was terminated. The *nn* field identifies the highest condition code encountered.

System Action: Processing was terminated. Subsequent commands were ignored.

User Response: Correct the errors. Reissue the command that failed and any subsequent commands that were not processed.

Problem Determination: 2, 3, 8

DSP0210I CLOSING QUOTE DELIMITER MISSING - ONE IS ASSUMED

Explanation: A quote delimiter, which specifies the end of a character string that began with a quote, was not encountered before the end of the command input line, and the minus continuation delimiter (to continue the line) was not specified.

System Action: A closing quote delimiter was assumed at the end of the input line. Processing of the command continued.

User Response: Correct the command if the assumed quote delimiter caused other problems.

Problem Determination: 2, 3

DSP0211I COMMAND PROCESSING COMPLETE. HIGHEST CONDITION CODE=nn

Explanation: All Recovery Control utility commands in the SYSIN input data set have been processed. The nn field identifies the highest condition code encountered.

System Action: None.

User Response: If the condition code is not 0, determine from other messages if processing was successful.

Problem Determination: 2, 3, 8

DSP0212I STRING BEGINNING string IS TOO LONG

Explanation: The identified character-string exceeded 255 characters for the command being processed. The message identifies up to the first 20 characters of the string in error. The error might be caused by a missing closing quote delimiter.

System Action: This command failed, and subsequent commands were not processed.

User Response: Correct the character string with the error and reissue the command.

Problem Determination: 2, 3

DSP0213I COMMAND CONTINUATION ERROR

Explanation: The last record in a command contained a continuation delimiter, which indicates the command was continued, but no continuation record was found.

System Action: This command failed, and subsequent commands were not processed.

User Response: Remove the continuation delimiter or supply the continuation record. Reissue the command that failed, and any other commands that were not processed.

Problem Determination: 2, 3

DSP0214I NO COMMANDS IN INPUT FILE

Explanation: No commands were found in the SYSIN input file.

System Action: No processing was performed.

User Response: Correct the SYSIN input and rerun the job.

Problem Determination: 2, 3

DSP0215I NEITHER parameter1 NOR parameter2 PARAMETERS SPECIFIED

Explanation: Either the parameter1 parameter or the parameter2 parameter is required for the command, but neither parameter was specified in the command.

System Action: The command failed, and subsequent commands were not processed.

User Response: Correct the command and reissue it; any other commands that were not processed can also be reissued.

Problem Determination: 2, 3, 8, and listings of the RECON data set.

DSP0216I BOTH parameter1 AND parameter2 PARAMETERS SPECIFIED

Explanation: The parameter1 and parameter2 parameters are mutually exclusive parameters for the command being processed, but both have been specified in the command.

System Action: The command was processed.

User Response: Check the results of the command. When mutually-exclusive parameters are specified, the last one in the command is used.

Problem Determination: 2, 3, 8, and listings of the RECON data set.

DSP0217I THE FOLLOWING SYSIN RECORDS HAVE BEEN SKIPPED:

Explanation: Due to errors described in prior error messages, the remainder of the SYSIN input was not processed. This message precedes a list of records that were not processed.

System Action: Processing continues.

User Response: None.

Problem Determination: 2, 3, 8, and listings of the RECON data set.

DSP0218I END OF SKIPPED SYSIN RECORDS

Explanation: This message marks the end of the list of SYSIN records that were not processed because of prior errors.

System Action: Processing was completed.

User Response: None.

Problem Determination: 2, 3, 8, and listings of the RECON data set.

DSP0219I CLOSING PARENTHESES ASSUMED

Explanation: One or more parentheses delimiting the end of a parameter value were not encountered before the end of a command input line. A minus continuation delimiter was not specified to continue the line.

System Action: Closing parentheses were assumed at the end of the input line. Processing of the command continued.

User Response: Correct the command if the assumed closing parentheses caused other problems with processing of the command.

Problem Determination: 2, 3

DSP0220I COMMAND COMPLETION TIME time

Explanation: The DBRC command that was just processed completed at the specified time.

System Action: None.

User Response: None.

Problem Determination: None.

DSP0221I DSN PARAMETER MUST BE SPECIFIED WITH DDN FOR A DL1 DBDS DBD=dbd name DDN=ddnname

Explanation: An INIT.DBDS DBD(dbd) DDN(ddn) command without a DSN parameter was issued. The DSN parameter is required with the DDN parameter.

System Action: The command failed.

User Response: Check the command syntax.

Problem Determination: 2, 3, 8 and listings of the RECON data sets.

DSP0222I SPECIFIED PARAMETERS CONFLICT

Explanation: DBRC command processing discovered one of the following errors:

- The CHANGE.DB command was specified with the ALL keyword and either the PINIT or NOPINIT keyword.
- The LIST.DBDS DBD(dbd) DDN(ddn) command
  - A DDN parameter was specified, but the DBDS is a DEDB.
  - The AREA keyword was specified, but the DBDS is a DL/I DBDS.
- The CHANGE.DB command was specified with the ALL keyword and either the NONRECOV, USERRCOV, or RECOVABL keyword.
- The CHANGE.DB command was issued with the GSGNAME and NOTCOVER parameter. These are mutually exclusive.
- The INIT.DBDS or CHANGE.DBDS command was issued with both the NOPREO and the PRELOAD parameters. A VSO area can only be preloaded if it has been preopened.
- The CHANGE.DB command was specified with the UNAUTH keyword, and some other keyword besides DBD, AREA, or ACTIVE|TRACKING was also specified.
- The CHANGE.DB command was specified with the ALL keyword and the NONRECOV, USERRCOV, RECOVABL, ICREQ, or NOICREQ keyword.
- The INIT.DB command was specified with the NOICREQ keyword but without the NONRECOV or USERRCOV keyword.
- The PARTSEL and HIKEY parameters are not allowed when the ALL keyword is specified.
- The INIT.DB command was specified with the USERRCOV keyword but without TYPEFP.

System Action: For the LIST.DBD command, processing continues with this message. For the CHANGE.DB command, processing fails and any subsequent commands are not processed.

User Response: For the LIST.DBD command, no action is required. For the CHANGE.DB command, correct the parameters and reissue the command.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0223I NO PARAMETERS SPECIFIED

Explanation: A CHANGE.RECON command was issued without specifying any parameter.

System Action: Processing continues with this message.

User Response: Correct the command and reissue it.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0224I SPECIFIED PARAMETERS ARE NOT ALLOWED

Explanation: Parameters specified within a command are not allowed. The following situations can cause this error:

- The CHANGE.DB command was specified with the PINIT or NOPINIT keyword for a non-HALDB.
- A parameter was specified for a Fast Path DEDB in a DL/I database or a parameter for a DL/I database in a Fast Path DEDB.
- The CHANGE.DBDS command was issued with the GSGNAME and NOTCOVER parameter. These are mutually exclusive.
- The CHANGE.DBDS command was issued with the DDN parameter and also one or more of the following parameters: GSGNAME, NOTCOVER, RCVTRACK, DBTRACK. These are not allowed with the DDN parameter.
- The CHANGE.DBDS PRELOAD|NOPREL command was issued for a non-VSO area.
- The CHANGE.DBDS or INIT.DBDS command specifying VSO|NOVSO, PREOPEN|NOPREO or PRELOAD|NOPREL was issued for a full function DBDS. These parameters are only applicable to Fast Path DEDB areas.
- The CHANGE.DBDS command was issued with one or more of the following parameters: CFSTR1, CFSTR2, LKASID. These are not allowed for share level 0 or 1 DEDBs.
- The GENJCL.IC command was issued with the NOCIC or CIC parameter and either COPIES(3) or COPIES(4) was specified. COPIES(3) or COPIES(4) can only be specified with SMSNOCIC or SMSCIC.
- PINIT or NOPINIT parameters cannot be specified with non-partitioned databases.

- NOPINIT cannot be specified with HIKEY because making a change to the Partition Selection routine will require the partition to be initialized.
- PARTSEL or HIKEY parameters can only be specified for HALDB databases.

System Action: This command failed, and subsequent commands were not processed.

Programmer Response: Correct the specified parameters and reissue the command.

Problem Determination: 2, 3, 8 and listings of your RECON data sets.

Module: DSPCHKWD, DSPJCIMG, DSPURM10, DSPURM60, DSPURS00, DSPURT20

DSP0225I SUBSYSTEM RECORD NOT MARKED AS RECOVERY PROCESSING STARTED SSID=ssid

Explanation: The command failed because the recovery-processing-started flag was not on in the specified subsystem record in the RECON data set.

System Action: Processing is terminated. The RECON data set is not updated.

User Response: Issue the DBRC CHANGE.SUBSYS STARTRCV command to mark the subsystem record as recovery-processing-started.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0226I SPECIFIED DBDS IS NOT FOR FAST PATH DBD=dbd name AREA=area name

Explanation: During DBRC command processing, a CHANGE.ADS, DELETE.ADS, or INIT.ADS command was issued but the DBDS is not a Fast Path DEDB.

System Action: The command failed and subsequent commands were not processed.

Programmer Response: Determine if a valid Fast Path DEDB was identified in the command and reissue the command and any others that were not processed.

Problem Determination: 2, 3, 8, and listings of your RECON data sets.

DSP0227I USE THE CHANGE OR DELETE BKOUT COMMAND INSTEAD REFERENCING DBDNAME=.....

Explanation: Because at least one backout record contains backouts for the database, the CHANGE.BKOUT or DELETE.BKOUT command must be used.

System Action: The command failed.

User Response: Use the CHANGE.BKOUT or DELETE.BKOUT command.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0228I NEW AREANAME ALREADY EXISTS IN RECON DBD=database name AREA=area name

Explanation: During DBRC command processing (that is, CHANGE.DBDS), a command to change the AREANAME of a Fast Path area in the RECON data set failed because an area with the same DBDNAME and AREANAME already existed in the RECON data set. The dbd name and area name fields identify the Fast Path area.

System Action: This command failed and subsequent commands were not processed.

User Response: Determine if the new AREANAME in the command was incorrect. If it was, correct it and reissue the command that failed, and any other commands that were not processed.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0229I VOLUME NOT FOUND IN LOG RECORD, VOLSER= volser

Explanation: The CHANGE.PRILOG or CHANGE.SECLOG command was issued with the OLDVOL parameter. The specified volume serial number was not found in the PRILOG or SECLOG record.

System Action: The command failed, and subsequent commands are not processed.

Programmer Response: Correct the volume serial number and reissue the command.

Problem Determination: 2, 3, 8, and a listing of the RECON data sets.

DSP0230I UNAUTHORIZATION PROCESSING WAS UNSUCCESSFUL DBD=*dbdname* AREA=*areaname* SSID=*subsystem name* RC=*return code*

Explanation: The subsystem called DBRC to unauthorize the AREA, but DBRC encountered a problem preventing successful unauthorization. RC identifies the error return code. See “Return Codes from Unauthorization Call” on page 395 for the meaning of the return code.

For RC=24, DBRC tried to calculate a new held-authorization state and a valid state was not obtained. The subsystem was unauthorized, but the AREA record is marked in the RECON data set so no other subsystem can be authorized to use the AREA. This is a program error in DBRC or IMS.

System Action: The unsuccessful return code is passed to the caller.

User Response: Gather information about the unauthorization process and contact the IBM Support Center. For RC=24, the AREA can be authorized again after all of the authorized subsystems have unauthorized the AREA.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

Module: DSPSDBUA

DSP0231I SPECIFIED AREA IS NOT IN RECOVERY NEEDED STATUS DBD=dbdname AREA=areaname

Explanation: The identified AREA was specified on a GENJCL.RECOV statement for the DB recovery utility to perform the track recovery for the DEDB. However, the specified area is not in recovery-needed status.

System Action: Processing was terminated.

Programmer Response: Check if the specified AREA is recovery-needed status (that is, the AREA is the recovery-needed flag off).

Problem Determination: 2, 3, 8, and a listing of the RECON data sets.

DSP0232I AREA IS NOT IN RECOVERY NEEDED STATUS DBD=dbd name AREA=area name

Explanation: The identified AREA data set was specified on SYSIN control statement for execution of the DEDB Initialization utility. However, the specified area is not in recovery-needed status and the specified area data set is not in unavailable status. The DEDB Initialization Utility can be allowed when the specified area has the recovery-needed flag on (recovery-needed status).

System Action: Processing by the DEDB Initialization utility was terminated.

User Response: Determine if the specified AREA record in RECON should be changed so that the recovery flags are turned on.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0233I AREA IS IN RECOVERY NEEDED STATUS DBD=dbd name AREA=area name

Explanation: An `INIT.ADS AVAIL` or `CHANGE.ADS AVAIL` command was issued for the specified Fast Path area. However, the AREA is in recovery-needed status. An `INIT.ADS AVAIL` or `CHANGE.ADS AVAIL` command can be specified only when the AREA is in not recovery-needed status. If the `INIT.ADS AVAIL` or `CHANGE.ADS AVAIL` command is to be specified for the recovery-needed AREA, the AREA has to be changed to the nonrecovery-needed status.

System Action: This command failed.

User Response: Either run the forward recovery utility for the area, or issue a `CHANGE DBDS` command to turn off the recovery flags.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0234I MAX NUMBER OF AREA DATA SETS BEEN REACHED DBD=dbd name AREA=area name

Explanation: An `INIT.ADS` command was specified for the AREA for which the maximum number of the AREA data set has been reached. Up to seven area data sets can be defined under one area. The total number of AREA data sets exceeds the allowable maximum of seven.

System Action: This command failed.

User Response: Check how many AREA data sets belong to this AREA.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0235I THE DS NAME OF THE FIRST AREA DATA SET WAS USED FOR THE DBDS DBD=dbd name DDN=ddname

Explanation: A `CHANGE.DB TYPEIMS` command for the DEDB record was specified. If the current DEDB has multiple AREA Data Sets, this message will be issued. This message indicates that the first data set in the ADS-LIST has been assigned as a DDN and a DSN for the DL/I DBDS record. This message is issued for information only.

System Action: Processing continues.

User Response: None.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0236I AREA IS STILL AUTHORIZED AND ADS IS AVAILABLE DBD=dbdname AREA=area name AREA=area name ADDN=ADS dd name

Explanation: A `DELETE.ADS` command was issued for an area data set that was still available and whose area was still authorized. A `DELETE.ADS` command is not allowed when the AREA is authorized and the specified ADS is available.

System Action: This command failed.

User Response: Wait until the area is unauthorized or the ADS is unavailable.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0237I AREA IS STILL AUTHORIZED AND ADS IS BEING USED BY THE CREATE UTILITY DBD=dbd name AREA=area name ADDN=ADS dd name

Explanation: A DELETE.ADS command was issued for an area data set whose AREA is still authorized, and the Create utility is running for the area data set. A DELETE.ADS command is not allowed when the AREA is authorized, and the Create utility is running for the area data set.

System Action: This command failed.

User Response: Wait until the area is unauthorized and the Create utility completes.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0238I CANNOT DELETE OLDS SSID=ssid DDNAME=ddname

Explanation: A request was made to delete the last closed online log data set (OLDS) for the subsystem. This data set should not be deleted because it might be needed to close the first online log data set in a later restart.

System Action: The command failed, and subsequent commands are not processed.

User Response: If the data set must be deleted, execute the DELETE.LOG command with the LASTCLOS keyword.

Problem Determination: None.

DSP0239I INCORRECT NUMBER OF TIME STAMPS FOR NEWTIME PARAMETER

Explanation: The CHANGE.PRILOG or CHANGE.SECLOG command specified the NEWTIME parameter. An incorrect number of timestamps was given for the NEWTIME parameter. The number of timestamps on the NEWTIME parameter must be one less than the number of volumes specified for the NEWVOL parameter.

System Action: The command failed, and subsequent commands are not processed.

Programmer Response: Specify the correct number of timestamps and reissue the command.

Problem Determination: 2, 3, 8, and a listing of the RECON data sets.

DSP0240I NO AREA DATA SETS TO PROCESS

Explanation: No area data sets meet the selection criteria of the command entered. For the GENJCL.RECOV command, there is no unavailable ADS. For GENJCL.IC, there is no available ADS to process.

System Action: This command failed, and subsequent commands were not processed.

Programmer Response: Issue the CHANGE.ADS command to set the ADS AVAIL or UNAVAIL as appropriate.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0241I RECON2 AND/OR RECON3 MUST NOT BE ALLOCATED

Explanation: An attempt was made to upgrade the RECON data set while a data set was allocated to RECON2, RECON3, or both. The RECON Upgrade utility does not allow RECON2 or RECON 3 to be allocated during execution.

System Action: Processing is terminated.

User Response: Delete the DD statement for RECON2, RECON3, or both.

Problem Determination: 2, 3, 8

DSP0242I RECONn DSN=dsname REPLACED BY RECONm DSN=dsname

Explanation: The RECONn data set has been replaced as an active RECON data set by the RECONm data set. This can occur because of an I/O error on RECONn, or because of the CHANGE.RECON REPLACE(RECONn) command.

System Action: Processing continues.

User Response: None.

Problem Determination: None.

DSP0243I JOB TERMINATED DUE TO UNAVAILABLE SPARE RECON DATA SET. THE ONLY AVAILABLE RECON IS DSN=dsname.

Explanation: DBRC was unable to locate two matching RECON data sets and no spare RECON data set was available. The operating mode does not allow a single RECON data set to be in effect. If more than one RECON data set was presented to the job, the most current data set is identified by dsname.

System Action: The job is terminated.

User Response: Define two spare RECON data sets and rerun the job.

Problem Determination: None.

DSP0244I JOB CONTINUING IN SPITE OF UNAVAILABLE SPARE RECON DATA SET

Explanation: DBRC was unable to locate two matching RECON data sets, and no spare RECON data set was available. The operating mode allowing a single RECON data set is in effect.

System Action: Processing continues.

User Response: None.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0245I JOB TERMINATED DUE TO UNAVAILABLE RECON DATA SETS

Explanation: DBRC was unable to locate any RECON data set.

System Action: The job is terminated.

User Response: Define RECON data sets, and rerun the job.

Problem Determination: None.

DSP0246I DSSN PROCESSING UNABLE TO CONTINUE DBDNAME=dbd DDNAME=ddn DSSN=nnnnnnnn

Explanation: During the DBRC processing of the change accumulation exits or of the GENJCL.CA command, DSSN processing, which determines the place of the log volume in the log volume chain, found an error. There were conflicting DSSN values for database data sets that were changed by two log volumes.

System Action: Processing is terminated. If a command was processing, subsequent commands are not processed.

User Response: If NOTIFY commands were used to enter information about log records and allocation records, the values of the DSSNs in the allocation records need to be checked. If the NOTIFY commands were not used, gather information for APAR analysis.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0247I INVALID LOG VOLUME SUBSET WAS FOUND

Explanation: During input validation for Change Accumulation utility, or while generating JCL for the utility, DBRC determined that one or more of the required log volumes were not available.

If the message was issued during input validation, either the utility JCL did not specify all required log volumes, or one or more of the specified log volumes were not available.

If the message occurred during JCL generation, one or more of the log volumes that must be included in the generated job were not available.

Log volumes might be unavailable for one or more of the following reasons:

- A required volume was in use by an active subsystem.
- An unarchived online log data set was required.
- A required log volume was marked in error.

This message might also occur if an invalid CATIME parameter was specified on the GENJCL.CA command.

System Action: Processing is terminated. If the message was issued during GENJCL processing, subsequent commands will not be processed.

User Response: Resubmit the job with a valid log subset specified either in the JCL or with a valid value for the CATIME parameter. It might be necessary to close log volumes that are in use by an active subsystem, to archive required OLDS data sets, or to use the IMS Log Recovery utility to recover a log volume that is marked in error.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0248I RECON DATA SET PARTIALLY UPGRADED

Explanation: A non-concurrent upgrade of a single RECON data set was attempted and failed, leaving the RECON data set partially upgraded and inaccessible by further operations.

System Action: Processing is terminated.

Programmer Response: Delete and reallocate the new RECON data set. Reissue the CHANGE.RECON UPGRADE command.

Recommendation: Use two RECON data sets and a spare. In case of a failure, DBRC can automatically restore your RECON data sets to their original state and discard the unusable RECON data set.

DSP0249I RECON IN USE, CANNOT UPGRADE

Explanation: This message is issued by the RECON batch command processor executing the CHANGE.RECON UPGRADE command. RECON is currently in use by one or more IMS subsystems, and the command cannot be executed for one of the following reasons:

- The IMS Version 9 coexistence SPE has not been applied to one or more of the IMS subsystems. The RECON cannot be upgraded while in use by a subsystem that is not prepared to read an IMS Version 9 RECON.

- The CHANGE.RECON UPGRADE command cannot be executed because less than three RECON data sets are allocated. This condition could compromise RECON integrity if an I/O error occurs during the upgrade process.

System Action: The CHANGE.RECON UPGRADE command fails with RC=8.

Programmer Response: Before executing the CHANGE.RECON UPGRADE command, ensure that the IMS Version 9 coexistence SPE has been applied to all subsystems accessing the RECON and that two RECON data sets are allocated in addition to a spare data set.

Module: DSPUGR00

DSP0251I RECON COPY *n* UPGRADE IS BEGINNING

Explanation: The CHANGE.RECON UPGRADE command is beginning to upgrade the records in the RECON copy data set identified in the message. If a failure occurs during an upgrade for copy 1, DBRC reconfigures the RECON and discards Copy 1; in this case, rerun the CHANGE.RECON UPGRADE command. If a failure occurs during an upgrade for copy 2, DBRC attempts to reconfigure the RECON and discards copy 2; in this case, the upgrade is successful and you do not need to rerun the CHANGE.RECON UPGRADE command.

User Response: None.

Module: DSPURI00

DSP0252I RECON COPY *n* UPGRADED SUCCESSFULLY

Explanation: The CHANGE.RECON UPGRADE command successfully upgraded all records in the RECON copy data set identified in the message.

User Response: None.

Module: DSPURI00

DSP0255I RECONn IS NOT IN USE

Explanation: The CHANGE.RECON REPLACE(RECONn) command was used to replace the specified RECON data set with a spare RECON data set. However, DBRC was not using the specified RECON data set DBRC when the command was issued.

System Action: The command fails and further commands are not processed.

User Response: Reissue the command, specifying an active RECON data set.

Problem Determination: None.

DSP0256I NO SPARE RECON DATA SET AVAILABLE

Explanation: The CHANGE.RECON command was used to reenter dual RECON mode or to replace an active RECON data set with a spare RECON data set. However, no spare RECON data set was available.

System Action: The command fails, and further commands are not processed.

User Response: Define a spare RECON data set and reissue the command.

Problem Determination: None.

DSP0260I NO *insrt-1* RECORDS FOUND IN RECON *insrt-2*

Explanation: There is no record of the specified type in the RECON data sets for an online log data set with the specified characteristics. *Insrt-1* can be ONLINE LOG, UNARCHIVED LOG, INT-ONLINE LOG, INTERIM RLDS/SLDS, TRACKING SLDS, or UNARCHIVED SLDS.*Insrt-2* can be SSID=8-character name or blank. This can occur during the execution of the IMS Log Archive utility, GENJCL.ARCHIVE command, GENJCL.CLOSE command, LIST.RECON command, or LIST.LOG command. For the LIST.LOG command, if a subset of records is requested but no online records exist, the message will address the larger set. For example, if LIST.LOG UNARCH is issued and no online records exist, the message will say NO ONLINE LOG RECORDS FOUND..., rather than NO UNARCHIVED LOG RECORDS FOUND....

System Action: If the error occurs during the execution of the LIST command, processing continues. If the error occurs during the execution of the GENJCL.ARCHIVE command, the command fails, and subsequent commands are not processed. If the error occurs during the execution of the IMS Log Archive utility, the utility processing is terminated.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0261I NO ONLINE LOG FOUND IN RECON SSID=ssid DDNAME=ddname

Explanation: There is no record in the RECON data sets of an online log data set for the specified IMS subsystem with the specified DD statement. This can occur during the execution of the IMS Log Archive utility, GENJCL.ARCHIVE command, LIST.LOG command, or DELETE.LOG command.

System Action: If the error occurs during the execution of the LIST.LOG command, processing continues. If the error occurs during the execution of the DELETE.LOG or GENJCL.ARCHIVE command, the command fails, and subsequent commands are not processed. If the error occurs during the execution of the IMS Log Archive utility, the utility processing is terminated.

User Response: Determine if the SSID and DDNAME parameters were specified correctly. If not, correct the error and resubmit the request.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0262I NO insrt-1 insrt-2 RECORDS FOUND IN RECON insrt-3

Explanation: A `LIST.LOG OPEN` or `LIST.LOG ERROR` command was issued, and no insrt-1 records exist in the RECON data sets. Insrt-1 will be either ERROR or OPEN. Insrt-2 will be either UNARCHIVED, ONLINE, or INT-ONLINE. Insrt-3 will be either SSID=8-character name or blank. For the `LIST.LOG` command, if a subset of records is requested, but no online or interim online log data set records exist, message DSP0260I will be displayed.

System Action: Processing continues.

User Response: None.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0263 EXTRANEOUS SECOLDS RECORD FOUND IN RECON SSID=ssid

Explanation: When the `LIST.LOG SSID(ssid)` command was issued for a specific subsystem, no PRIOLDS record existed, but a SECOLDS record did exist. This indicates an inconsistency in the RECON data sets. The extra record is displayed after this message is issued.

System Action: Processing continues.

User Response: Correct the inconsistency in the RECON data sets.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0264I SSID PARAMETER REQUIRED WITH OLDS(DDNAME) - BECAME ALLOLDS

Explanation: A `LISTLOG OLDS(ddname)` command was issued without specifying a subsystem name. The command is treated as though ALLOLDS had been specified.

System Action: Processing continues.

User Response: None.

Problem Determination: None.

DSP0265I OLDS SSID=ssid TIME=timestamp IS NEEDED TO CLOSE OLDS DDNAME=ddname

Explanation: A request was made to delete the record of a online log data set from the RECON data sets. The request failed because IMS did not close the online log data set used immediately before the specified online log data set. Thus the specified online log data set will be needed to close the previous online log data set.

System Action: The command failed, and subsequent commands were not processed.

User Response: Use the IMS Log Recovery utility to close the online log data set in error. The ddname listed is the ddname that should be specified on the `GENJCL.CLOSE` command to generate a job to close the online log data set in error. After closing the online log data set in error, reissue the command and any others that were not processed.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0266I insrt1 insrt2 INCONSISTENT WITH PRIOLDS SSID=ssid

Explanation: A `NOTIFY.SECLOG OLDS` or a `NOTIFY.PRI/SECLOG OLDS INTERIM` was issued. However, the information in the command is inconsistent with the existing information in RECON. See Table 127 on page 408 for a list of the possible error conditions.

System Action: The command failed, and subsequent commands were not processed.

User Response: Correct the error and reissue the command in error.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0267I record type CAN NOT BE CHANGED, DATA SET NOT CLOSED

Explanation: A `CHANGE.PRILOG` or `CHANGE.SECLOG` command was issued to change the RECON record of a log data set. However, the log data set is still open. RECON records of the log data sets cannot be changed until RECON is notified of the data set close.

System Action: The command failed, and subsequent commands were not processed.

User Response: Use the `NOTIFY.PRILOG` or `NOTIFY.SECLOG` command to inform RECON of the closing of the log data set and reissue the command.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0268I record-type RECORD NOT FOUND IN RECON SSID=ssid DDNAME=ddname

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DSP0268I record-type RECORD NOT FOUND IN RECON SSID=ssid TIME=timestamp

DSP0268I record-type RECORD NOT FOUND IN RECON SSID=ssid DDNAME=ddname TIME=time-stamp

Explanation: The request to access or change the record of a log data set in the RECON data sets failed because a record with the specified attributes could not be found. The SSID, DDNAME and STARTIME parameters identify the requested record.

System Action: The requested access of, or change to, the RECON data set failed.

User Response: Correct the attributes that identify the record, and reissue the command that failed.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0269I type RECORD ALREADY EXISTS IN RECON SSID=ssid DDNAME=ddname

DSP0269I type RECORD ALREADY EXISTS IN RECON SSID=ssid TIME=timestamp

Explanation: A command to add a record to the RECON data set specifies a subsystem identifier and DD statement or start time that already exists for a record of the same type.

System Action: The command failed, and no subsequent commands were processed. No changes were made to the RECON data sets.

System Operator Response: Reissue the command, specifying a unique subsystem identifier and DD statement.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0270I ONLINE LOG ALREADY status SSID=ssid DDNAME=ddname

Explanation: A request was made to change the status of an online log data set in the RECON data sets. However, the RECON record of the online log data set already had the indicated status. The status can be either ARCHIVED, STARTED, or CLOSED. This can occur during the execution of the IMS Log Archive utility, `GENJCL.ARCHIVE` command, `GENJCL.CLOSE` command, `CHANGE.PRILOG` command, or `CHANGE.SECLOG` command.

System Action: When the error occurs during the execution of the IMS Log Archive Utility, the IMS Log Recovery Utility, and a command, the following conditions result:

IMS Log Archive Utility
The utility processing is terminated if all input online log data sets are already archived or are being archived (archive STARTED). If at least one input online log data set has not been archived, the utility continues archiving the unarchived online log data sets.

IMS Log Recovery Utility
Processing is terminated.

Command
The command fails and subsequent commands are not processed. The command does not fail for STARTED status. See the User Response.

User Response: This message is for informational purposes only and in most cases, no user response is required. The STARTED status is normal if the indicated online log data set is currently being archived by another job.

If the message is received during GENJCL, then that OLDS is not included in the generated JCL. If the message is received during the IMS Log Archive utility, then that OLDS is treated as if it had been previously archived. A `LIST.LOG OLDS(ddname)` command shows the archive job name that is running. If that job failed and DBRC was not notified, then the OLDS status remains ARC started and that OLDS is not archived until a `CHANGE.PRILOG OLDS(ddname) ARNEEDED` command is issued.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0271I ONLINE LOGS TO BE ARCHIVED ARE NON-CONTINUOUS

Explanation: An attempt to archive a set of online log data sets was made, but the online log data sets to be archived are not contiguous. That is, at least one online log data set exists that was used after the first specified online log data set and before the last specified online log data set.

System Action: Processing is terminated by the IMS Log Archive utility.

User Response: Use the `LIST.LOG` command with the ALLOLDS parameter to determine the missing online log data sets. Issue the `GENJCL.ARCHIVE` command, specifying all unarchived online log data sets, or issue the `GENJCL.ARCHIVE` command, specifying ALL.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0272I ONLINE LOG TO BE ARCHIVED IS state SSID=ssid DDNAME=ddname

Explanation: A request was made to archive the online log data set with the specified subsystem ID and DD statement. However, the RECON record of the online log data set indicated that the online log data set was either STILL OPEN or IN ERROR. This can occur

during the execution of the IMS Log Archive utility or the GENJCL.ARCHIVE command.

System Action: If the error occurs during the execution of the IMS Log Archive utility, the utility processing is terminated. If the error occurs during execution of the GENJCL.ARCHIVE command, the return code will determine if the command is successful. If GENJCL.ARCHIVE ALL is being executed, and at least one OLDS is found that can be archived, the command will complete successfully with return code 4.

User Response: If the GENJCL.ARCHIVE command completed with return code 4, JCL can be executed. If the indicated state is STILL OPEN, wait until IMS has finished using the OLDS, and reissue the request. If the indicated state is IN ERROR, use the IMS Log Recovery utility to correct the error and reissue the request.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0273I ONLINE LOG NOT ARCHIVED SSID=ssid DDNAME=ddname

Explanation: A DELETE.LOG command was issued for the identified log data set, but it has not been archived.

System Action: The command fails, and subsequent commands are not processed.

User Response: Use the IMS Log Archive utility to archive the online log data set and reissue the DELETE.LOG command.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0274I UTILITY REQUESTING AN UNARCHIVED ONLINE LOG OR AN UNAVAILABLE LOG DBDNAME=*dbdname* DDNAME=*ddname* ALLOC TIME=*time*

Explanation: This is an informational message. A utility request requires an online log data set that has not been archived. A utility cannot use log data until the online log data set has been archived to a system log data set. This error can occur during the execution of the IMS Database Recovery utility, the IMS Change Accumulation utility, GENJCL.RECOV command, or GENJCL.CA command.

System Action: Processing continues and DBRC will determine if the open log is required for the requested function.

Programmer Response: If the open log is needed for the requested function, use the IMS Log Archive utility to archive the online log data set. After the archive has completed, reissue the request.

If no open logs are found, the database allocation time is greater than the PRILOG stop time. The allocation time can be entered manually using the DBRC command. The IMS Log Recovery utility (DFSULTR0) might have been run with ERRC=0000, which closes the new log on the first error encountered. Resolve the problem, and reissue the request.

If the message was issued when a utility was running, use DBRC to generate new JCL and compare the new JCL with the original JCL for possible errors.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0275I DDNAME ddname APPEARS MORE THAN ONCE

Explanation: The GENJCL.ARCHIVE command was issued, specifying a list of online log data set DD statements. However, the specified DD statement appears more than once in the DD statement list.

System Action: Processing continues. The extra DD statements are ignored.

User Response: None.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0276I NO ONLINE LOG DATA SETS TO BE PROCESSED

Explanation: During the execution of a GENJCL.ARCHIVE command, no online log data sets met the requirements of the command and none of the online log data sets were unarchived.

System Action: The command failed, and subsequent commands were not processed.

User Response: None.

Note: If an emergency restart (/ERE) was issued after a normal IMS shutdown, the automatic archive job submitted by the emergency restart processing will fail, and this message can be ignored.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0277I ONLINE LOG HAS INCORRECT DATA SET NAME SSID=ssid DDNAME=ddname

Explanation: A request was made to archive the online log data set with the specified subsystem ID and DD name. However the data set name specified on the DD statement for the archive utility is different from the data set name reflected in RECON.

System Action: Processing by the archive utility is terminated.

User Response: Probable user error. Correct the JCL for the archive utility and resubmit the archive job.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0280I TRACK OPTION INVALID - USE ICKDSF UTILITY

Explanation: The TRACK option was specified on the GENJCL.RECOV command. This option is no longer supported in DFP V3.1.

System Action: The command fails and subsequent commands are not processed.

Programmer Response: Either reissue the command without the TRACK option specified, or run the ICKDSF utility.

Problem Determination: 2, 3, 8, and a listing of the RECON data sets.

DSP0281I LOG MERGE REQUIRED FOR RECOVERY REQUEST DBDNAME=dbdname DDNAME=ddname

Explanation: During the execution of the GENJCL.RECOV command or the IMS Database Recovery utility, it was determined that two or more log data sets must be merged in order to recover the database data set. The log data sets must be merged prior to recovering the database data set.

System Action: The GENJCL.RECOV or Database Recovery utility execution fails.

User Response: The log data sets must be merged. If the database data set is a member of a change accumulation group, use the IMS Change Accumulation utility to merge the log data sets.

Problem Determination: 2, 3, 8, and listings of the RECON data set.

DSP0282I BACKOUT NEEDED FOR DBD dbname—RECOVERY PROCESS ABORTED

Explanation: During execution of the GENJCL.RECOV command or the IMS Database Recovery utility, the status of the specified database was backout needed. Because dynamic backout executes automatically when this database is started, recovery must not be allowed. If backout is run following a recovery, database damage might result.

System Action: Processing terminates for the database. If this error occurs during GENJCL for a group, the processing continues for the other members of the group.

Programmer Response: Either run BACKOUT for the database or issue the CHANGE.DB NOBACK command to turn off the BACKOUT NEEDED flag prior to running recovery.

Problem Determination: Informational message only.

DSP0283I UNABLE TO DELETE ERROR QUEUE ELEMENT(S) AS DBDS dbdsname CONTAINS NO EQES

Explanation: A request to delete the error queue elements from the specified DBDS or DEDB AREA record failed because there was no error queue elements in the record.

System Action: The command failed, and subsequent commands are not processed.

Programmer Response: None.

Problem Determination: 2, 3, 8, and a listing of the RECON data sets.

DSP0284I UNABLE TO DELETE ERROR QUEUE ELEMENT eqe FOR DBDS dbdsname AS THE SPECIFIED EQE DOES NOT EXIST

Explanation: A request to delete the specified error queue element from a DBDS or DEDB AREA record failed because the error queue element does not exist in the record.

System Action: The command failed, and subsequent commands are not processed.

Programmer Response: Correct the error queue element, then reissue the command.

Problem Determination: 2, 3, 8, and a listing of the RECON data set.

DSP0285I IRLMID SPECIFIED FOR SUBSYSTEM SSID=ssid INCORRECT

Explanation: An attempt was made to notify DBRC of the existence or deletion of an alternate subsystem. The IRLMID parameter specified in the command does not match the IRLMID in the subsystem record.

System Action: The command failed, and subsequent commands are not processed.

Programmer Response: Issue a LIST.SUBSYS command to verify that the IRLMID is correct for the specified subsystem.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0286I NO BACKUP SUBSYSTEM EXISTS FOR SUBSYSTEM SSID= ssid

Explanation: A request to delete an alternate (backup) subsystem failed because there is no alternate subsystem for the indicated subsystem.

System Action: None.

Programmer Response: Issue the LIST.SUBSYS

command for the specified subsystem to verify that an alternate subsystem name exists.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0287I OLDS SWITCH PROCESSING TERMINATED PRILOG|PRISLDS RECORD LENGTH CRITICAL

Explanation: The amount of space needed to record the archive data sets after all the OLDS are archived (including the OLDS being switched from and the OLDS being switched to) exceeds the maximum PRILOG or PRISLDS record length.

System Action: The OLDS switch fails with return code 44 (X'2C'), IMS issues message DFS2482I, and the IMS control region terminates with abend U0071.

Master Terminal Operator Response Before trying to emergency restart the control region, run any archive jobs that were generated before the IMS control region terminated.

DSP0287W *WARNING* PRILOG|PRISLDS RECORD LENGTH CRITICAL

Explanation: If logging continues so that an additional OLDS switch will cause the PRILOG or PRISLDS record length to be exceeded (after all OLDS are archived), DBRC will terminate the OLDS switch, force the shutdown of the IMS and issue message DSP0287I. The exact point in IMS processing where this message is issued is determined by the value of the LOGALERT parameter of the DBRC `CHANGE.RECON` command.

System Action: IMS continues processing.

Master Terminal Operator Response: Stop the IMS control region as soon as possible.

DSP0289I "ABNORMAL" PARAMETER IS INVALID WHEN A BACKUP SUBSYSTEM IS AVAILABLE

Explanation: A request to change the status of the subsystem record to abnormal failed because a backup subsystem was available (BACKUP=YES).

System Action: The command fails and subsequent commands are not processed.

Programmer Response: Determine if the backup subsystem is in fact unavailable. If so, issue the `CHANGE.SUBSYS NOBACKUP` command to reset the backup flag.

Problem Determination: 2, 3, 8, and a listing of the RECON data sets.

DSP0291I THE TIME ZONE LABEL TABLE IS FULL.

Explanation: A `CHANGE.RECON TIMEZONE` command attempted to add a new entry to the time zone label table, but the table already contains the maximum number of 32 entries.

System Action: The command fails.

System Operator Response: Remove any unnecessary entries in the table and reissue the command.

Module: DSPURM90

DSP0292I ONLINE REORG ACTIVE FOR DBD=*XXXXXXXX*

Explanation: A command was issued to add or change information in the RECON data set. The command cannot be processed when HALDB OLR is active. If HALDB OLR is active and has an owning IMS which is currently active, parameters OLRRGON | OLRRGOFF, OLRIMSID() | NOOWNER, and OLRDBDS(A|M) are not allowed. Parameter OLRDBDS(A|M) is not allowed if HALDB OLR is active.

System Action: Processing is terminated. The command fails. Review the RECON contents.

Programmer Response: Contact the IBM Support Center if you require additional assistance.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0293I ACTIVE DBDS=M-V FOR DBD=*XXXXXXX*

Explanation: A command was issued to add or change information in the RECON data set. The command cannot be processed when the M-V DBDS data sets are active.

System Action: Processing is terminated. The command fails. Review the RECON contents.

Programmer Response: Contact the IBM Support Center if you require additional assistance.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0295I SUBSYSTEM RECORD NOT FOUND IN RECON

Explanation: A command was issued to change the owning IMS for a HALDB OLR but the subsystem record for OLRIMSID name was not found.

System Action: Processing is terminated and the command fails. Review your RECON contents. The subsystem record must exist.

Programmer Response: Contact the IBM Support

Center if you require additional assistance.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0299I ONLINE SUBSYSTEM RECORD SSID=*name* BEING DELETED BY COMMAND

Explanation: An online subsystem record, whose name is identified in the SSID parameter, was deleted by command processing (for example, with the `DELETE.SUBSYS SSID(name)` command).

This message is informational and is issued when a subsystem record of `sstype=online` is deleted by command processing.

Both subsystem records that are created by online IMS systems and online image copy jobs have the `sstype=online` set.

If you issue a `CHANGE.SUBSYS STARTRCV` and `CHANGE.SUBSYS ENDRECOV` command to remove database authorizations to the online subsystem record before issuing the command `DELETE.SUBSYS SSID (name)`, this message is also issued.

Programmer Response: The message is issued as a WTO, and the job issuing the message is identified. You can ignore this message unless you issued the `DELETE.SUBSYS SSID(name)` command in error. In this case, the online system abends when it notices the missing data from the RECON.

Problem Determination: 1, 2, 3

DSP0300I INTERNAL DBRC ERROR *mmmmmmmm(aaaaaaaa)* +X *oooo* #*nn term/dump*

DSP0300I DIAG=*dddddddd*

Explanation: An internal error in the IMS Database Recovery Control Facility was detected. Except for the 'term' and 'dump' values, the information in the message is intended for problem analysis by IBM personnel. ABEND U2480 might follow this message.

mmmmmmmm
Name of the module that detected the error.

aaaaaaaa
Maintenance level of the module.

oooo Offset in the module where the message was issued.

nn The *nn* DSPSTOP invocation in the module. For example, if *nn*=5, the message was produced by the 5th DSPSTOP invocation.

term Can be either:

TERM DBRC terminated with ABEND U2480.

CONT DBRC execution continues, even if ABEND U2480 was requested with a dump.

dump Can be either:

DUMP An ABEND U2480 was requested with a dump.

NODUMP
No dump was requested.

dddddddd
A character string further identifying the error.

User Response: Contact your IBM Support Center for assistance.

Problem Determination: 2, 3, 8, 35, the dump provided by ABEND processing if one was requested, and listings of the RECON data set.

DSP0301I LOG INPUT NOT USABLE BEYOND start time

Explanation: A utility attempted to use a primary log data set. The record in the RECON data set that identifies the primary log data set indicates that it is unusable, and a corresponding secondary log data set does not exist or is also marked as unusable. Unusable log data sets are not permitted for subsequent processing of utilities other than the log-termination utility or the log-recovery utility. The start time field identifies the primary log data set by its volume start time. If the Change Accumulation Utility was executing and message DSP0247I accompanies this message, then the utility execution will fail. Otherwise, the Change Accumulation Utility will continue processing the log volumes found before the unusable log volume.

System Action: Processing of the utility attempting to use the primary log data set was terminated.

User Response: Determine the status of the identified primary log data set, and do one of the following before rerunning the job that failed:

- If the primary log data set needs to be terminated or recovered, execute the System Log Terminator utility or System Log Recovery utility, respectively. If the System Log Recovery utility is used, issue a `CHANGE.PRILOG` or `CHANGE.SECLOG` command to record information about the new log volumes in the RECON data set.
- If the log data set should be ignored, issue a `DELETE.LOG` command to delete the records of the log data sets.
- If the stop time of the primary log data set was never recorded in the RECON data set, but otherwise the primary log data set is correct, issue the `NOTIFY.PRILOG` command to add the stop time information to the RECON set.

- If the log data set is now usable, issue a CHANGE.PRILOG or CHANGE.SECLOG command to indicate in the record of the log data set that it is usable.

Problem Determination: 2, 3, 8, and listings of the RECON data set

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DSP0302I PRIMARY LOG NOT FOUND WITH START TIME timestamp DBDNAME=name DDNAME=name

Explanation: Allocation records in the RECON data set for the identified database data set or area data set that is identified by the DBDNAME and DDNAME fields indicate that a primary log record exists, but the record was not found in the RECON data set. This indicates an inconsistency in the RECON data set. The timestamp field identifies the start time of the primary log data set.

System Action: The utility failed.

User Response: From a list of the RECON data set, identify the inconsistency of information about the identified primary log data set. If the record of the primary log data set was inadvertently deleted from the RECON data set, issue a NOTIFY.PRILOG command to add the record to the RECON data set. If the allocation records are incorrect, delete them with a DELETE.ALLOC command and add correct information with a NOTIFY.ALLOC command.

Problem Determination: 2, 3, 8, and listings of the RECON data set

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DSP0303I AN OPEN LOG VOLUME WAS FOUND DBDNAME=dbdname DDNAME=ddname

Explanation: There exists a log volume that was not successfully closed, and that might contain change records for the database data set or area data set identified by the DBDNAME and DDNAME or ADDN fields. This indicates that either information in the RECON data set about the volume is not complete or log errors exist that can prevent recovery of the identified database data set.

System Action: The utility will fail unless it is the Change Accumulation utility. If the Change Accumulation utility is executing and message DSP0247I accompanies this message, then the utility execution will fail. Otherwise, the Change Accumulation utility will continue processing the log volumes found before the unusable log volume.

User Response: Do the following:

1. Stop all IMS activity.
2. Issue a LIST.LOG command with the ALL parameter to list all the information in the RECON data set about all log data sets.
3. For each log volume that does not have a volume stop time (other than the current log volume), execute the System Log Terminator utility for the volumes in the same order in which they were created. If the log volume was successfully terminated, issue a NOTIFY.PRILOG or a NOTIFY.SECLOG command to add the volume stop time to the RECON data set.

Problem Determination: 2, 3, 8, and listings of the RECON data set

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DSP0304I TIMER SERVICES FAILURE

DSP0304I FUNCTION = *function*

DSP0304I DIAGNOSTIC CODE = *diagcd*

DSP0304I CALLER = *modname* TIMESTAMP=*timestamp*

Explanation: The DBRC time service module DSPTIME0, which was called by DBRC module *modname*, received an error return code from the identified IMS time service function. The values of *function* are:

- EXTERNAL TO INTERNAL
- GET CURRENT TIME
- UTC TO LOCAL
- LOCAL TO UTC
- INTERNAL TO EXTERNAL COMPRESSED
- INTERNAL TO EXTERNAL PUNCTUATED
- ADD/SUBTRACT INCREMENT

Only the “EXTERNAL TO INTERNAL” function is susceptible to direct user errors -- invalid time-stamp values coded in a DBRC command or on a utility SYSIN control statement.

Errors in the other functions can result from hardware problems, system logic errors, or invalid data in the RECON data set. In the latter case, if the error occurs during the LIST command, the time field in error is marked by the characters '**********ERROR**********' in the part of the listing that follows this message.

The diagnostic code *diagcd* identifies the error. A numeric value indicates a system internal error code returned from the IMS time service function. A non-numeric value indicates a user error.

Possible *diagcd* values for user errors in time stamps are:

Code	Meaning
YYL	Length of YY is not 2 or 4.
DDL	Length of DDD is not 3.

DDD The value of DDD is less than 001 or greater than 366.

The three previous error codes can indicate errors that are seemingly unrelated to the year and day values including, for example:

- A time stamp containing blanks was not enclosed in apostrophes.
- Four year digits were entered in the compressed-time format, which only allows two.
- Utility control-card formats have changed, but existing JCL has not been updated.

HHL Length of HH is not 2.

HH The value of HH is greater than 24.

MML Length of MM is not 2.

MM The value of MM is greater than 59.

SSL Length of SS is not 2.

SS The value of SS is greater than 59.

OFFSET Offset value is invalid.

MSEPS Consecutive non-numeric separators are present.

EXCESS Time value is too long, or there is non-numeric data at the end.

MVSOFF z/OS offset is invalid. The setting of the z/OS local-time clock resulted in an invalid offset from UTC (greater than +14 or less than -11).

ZERO A zero time value was entered where zero is not permitted.

timestamp is the hexadecimal representation of the internal timestamp passed by calling module *modname*. It is not supplied for a user error, because the value entered by the user always appears in the utility output preceding this message.

System Operator Response: If the diagnostic code indicates a user error, correct the error and retry. (For information on how to enter time-stamp data in DBRC commands, see the section on command syntax in the *IMS Version 9: Database Recovery Control (DBRC) Guide and Reference*.) Otherwise, contact the IBM Support Center.

Module: DSPTIME0

DSP0305I RECON CLEANUP WAS SUCCESSFUL

Explanation: A previous system failure left inconsistencies between the RECON data sets because the failure occurred during an update operation to the RECON data sets. The RECON data sets have been restored to a mutually-consistent state. The request that required a change in the RECON data sets and that was issued prior to the system failure might not have been performed.

System Action: Processing continued.

User Response: Determine which changes in the RECON data set were not made, from a listing of the RECON data set. Rerun whatever is necessary to make the changes.

Problem Determination: 2, 3, 8, and listings of the RECON data set.

DSP0306I RECON CLEANUP UNSUCCESSFUL. REASON CODE code

Explanation: A previous system failure left inconsistencies in the RECON data set because the failure occurred in the middle of an operation that was updating the RECON data set. The RECON data sets have not been restored to a mutually-consistent state. The reason code identifies the reason for the inconsistency. The reason codes have the following meanings:

Code	Meaning
01	RECON data set could not be opened
02	RECON data set encountered an I/O error
03	RECON header record not found
04	RECON Cleanup logical error
05	Header record not found for CAGRP or DBDS
06	Wrong CAGRP name in DBDS header record
07	Neither new nor old DBID in CAGRP record for request to change the ddname of a DBDS
08	LOGALL record not found

System Action: IMS processing was terminated.

User Response: Use an Access Method Services `PRINT` command to determine how the RECON data sets do not match. If they do not match, determine which one is the most correct and use an Access Method Services `REPRO` command to copy it to the least correct one. Once the RECON data sets match, make additional changes in both by using appropriate `NOTIFY`, `CHANGE` and `DELETE` commands.

Problem Determination: 2, 3, 8, and listings of the RECON data set.

DSP0308I COMMAND xxx HAS ABENDED

Explanation: A severe error occurred while processing command xxx. This message is issued only in an IMS or CICS online environment.

System Action: The command failed and is disabled for the remainder of the online invocation. A dump of the

DBRC address space is taken following the ABEND, but before normal processing resumes. The command will be enabled when this online region is restarted. The ability to issue this command in other online regions is not affected.

Programmer Response: None required.

Problem Determination: 2, 3, 8, and the dump provided by ABEND processing.

DSP0309I COMMAND xxx UNAVAILABLE

Explanation: Command xxx encountered a severe error and was disabled for further use.

System Action: Command xxx failed and will not be available until the online region is restarted or the command is reset.

Programmer Response: After determining and correcting the cause of the original failure, you can reset the command by resubmitting the online command with the RESET parameter specified.

Problem Determination: 2, 3, 8

DSP0310I CLOSE REQUESTED FOR AN ACTIVE SUBSYSTEM

Explanation: The Log Recovery utility tried to close an online log data set, but the RECON data set shows that this log data set is associated with an active subsystem.

System Action: The Log Recovery utility terminates processing.

User Response: Correct the JCL, specifying the correct online log data set; then resubmit the job. If the correct online data set was specified and the associated subsystem is not active, do one of the following:

- Issue the `DELETE.SUBSYS` command to delete the subsystem record from the RECON data set; then resubmit the job.
- Issue the `CHANGE.SUBSYS` command specifying the ABNORMAL parameter to indicate that the subsystem has terminated; then resubmit the job.

Problem Determination: 2, 3, 8 and listings of the RECON data sets.

DSP0311I INPUT ONLINE LOG RECORD NOT FOUND IN RECON

Explanation: While the IMS Log Recovery utility or the IMS Log Archive utility was being validated, no record was found in the RECON data set with a data set name and volume serial number combination to match the one specified in the JCL.

System Action: The utility execution is terminated.

User Response: Correct the JCL, specifying a valid log data set, and resubmit the job.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0313I DUPLICATE INPUT LOG DATA SET RECORD TIME=time

Explanation: During input validation for the IMS Log Recovery utility or the IMS Log Archive utility, multiple RECON records were found with the same data set name and volume serial number combination.

System Action: Processing is terminated. The Log Recovery utility or Log Archive utility

User Response: Use the `DELETE.LOG` command to delete the duplicated information from the RECON data sets.

Problem Determination: 2, 3, 8, and listings of the RECON data set

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DSP0314I CONCATENATED SLDS INPUT IS NOT CONTIGUOUS

Explanation: While validating input, the IMS Log Archive utility detected concatenated input DD statements that did not represent a contiguous set of log data sets.

System Action: The Log Archive utility terminates processing.

User Response: Noncontiguous logs cannot be archived in the same job step. Correct the JCL and resubmit the job.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0315 NO STOPTIME IN record, TIME=time

Explanation: During input validation for the IMS Log Archive utility, the RECON record of the input log data set indicated that the log data was not closed.

System Action: Processing by the Log Archive Utility is terminated.

User Response: Use the IMS Log Recovery utility to close the log data set and resubmit the archive job.

Problem Determination: 2, 3, 8, and listings of the RECON data set

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DSP0316I INPUT *rectype* DATA SET RECORD MARKED IN ERROR RECORD TIME=*time*

Explanation: While the input to the IMS Log Archive utility was being validated, a record was found in the RECON data set that matched the data set specified in the JCL. This input data set record is marked as being in error. The *rectype* indicates the type of record in error and is one of the following: PRILOG, SECLOG, PRISLDS or SECSLDS.

System Action: The utility execution continues for a dual logging environment if one of the dual logs given in the JCL is not marked as being in error in the RECON data set. In a single logging environment, the utility execution is terminated.

User Response: If the log data set being archived is in error, use the Log Recovery utility to correct it; then resubmit the archive job.

DSP0317I CLOSE REQUIRES ONLINE LOG SSID=ssid DDNAME=ddname

Explanation: The IMS Log Recovery utility was invoked to close an online log data set. According to the information in the RECON data sets, the online log data set identified in the message is needed to close the online log data set in error. However, the log recovery request specified that the IMS Write Ahead Data Sets or an invalid online log data set should be used to close the online log data set in error.

System Action: Processing Log Recovery utility is terminated.

User Response: Resubmit the close request, specifying the identified online log data set.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0318I INPUT ONLINE LOG RECORD NOT FOUND IN RECON

Explanation: During an open call from the IMS Log Recovery utility for an input log data set, no record was found in the RECON data sets for the online log data set. If DUP or CLS processing, no PRIOLDS record was found; if REP processing, no interim record was found.

System Action: Processing Log Recovery utility is terminated.

User Response: Use the `LIST` command to determine the correct online log data set. Correct the JCL and resubmit the job.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0320I CLOSE REQUEST REQUIRES WRITE AHEAD DATA SET

Explanation: During the execution of the close or the duplicate and close mode of the IMS Log Recovery utility, DFSULTR0, it was determined that the input online log data set was to be closed by using the next online log data set. Information in the RECON data set indicated that online log data set must be closed by using the write-ahead data set.

System Action: Processing by the utility is terminated.

User Response: Resubmit the utility job, specifying that the online log data set is to be closed using the write ahead data sets.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0322I INPUT LOGS TO ARCHIVE ARE FROM DIFFERENT SUBSYSTEMS

Explanation: The input logs to the IMS Log Archive utility were created by different subsystems. The logs must be associated with a common subsystem before the archive utility can process them.

System Action: Processing by the archive utility is terminated.

User Response: Change the archive job's JCL, specify the correct set of logs that you want to archive, and resubmit the job.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0321I INPUT ONLINE LOG DATA SET ALREADY CLOSED

Explanation: An attempt was made to use the IMS Log Recovery utility, DFSULTR0, to close an online log data set by using the write ahead data set. Information in the RECON data set indicates that online log data set has already been closed. A write ahead data set can only be used to close an open online log data set, or the `GENCJL.CLOSE` command was issued to close an online log data set that closed normally during the termination of IMS.

System Action: Processing by the utility is terminated.

User Response: If the failure occurred during the execution of the Log Recovery utility, resubmit the job recovery job, specifying that the online log data set is to be closed by using the next online log data sets.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0325I SKELETAL JCL MEMBER name NOT FOUND, DD NAME ddname

Explanation: The identified skeletal JCL member was not found in the data set associated with the identified ddname.

System Action: Processing of the `GENJCL` command is terminated and subsequent commands are not processed.

Programmer Response: There are two probable causes for this error:

1. The skeletal JCL data set specified was incorrect.
2. The member name specified was incorrect. The member name might have been specified by the MEMBER or DEFAULTS parameter on the `GENJCL`

command, or the member name might have been implicitly specified using the INIT.DBDS or INIT.CAGRP command.

To correct the first problem, specify the correct skeletal JCL data set and resubmit the command. To correct the second problem, specify the correct skeletal JCL member on the command, or change the implicitly specified member name by using a CHANGE.DBDS or CHANGE.CAGRP command.

Problem Determination: 2, 3, 8, and a listing of the RECON DATA sets.

DSP0326I UNDEFINED SIMPLE KEYWORD keyword name IN SKELETAL JCL MEMBER member name DD NAME ddname RECORD NUMBER nnn

Explanation: During the processing of the identified skeletal JCL member, a simple keyword without an assigned value was found for record number nnn. An undefined simple keyword within a comment statement can also cause this message. The skeletal JCL member was obtained from the skeletal JCL data set associated with the identified ddname.

System Action: Processing of the GENJCL command continues. No substitution is done for the undefined keyword. The keyword is included in the output file without change. The command completion code is set to 4.

Programmer Response: Determine if substitution should have occurred for the keyword. If so, reissue the GENJCL command specifying a value for the keyword with the USERKEYS parameter or through a skeletal JCL default member.

Problem Determination: 2, 3, 8, and listings of the skeletal JCL data set.

DSP0327I INVALID statement type CONTROL KEYWORD IN SKELETAL JCL MEMBER member name DD NAME ddname RECORD NUMBER nnn

Explanation: During the processing of the identified skeletal JCL member, an invalid control keyword statement was detected for record number nnn. The "statement type" can be %delete or %select. The skeletal JCL member was obtained from the skeletal JCL data set associated with the identified ddname.

System Action: Processing of the GENJCL command is terminated, and subsequent commands are not processed.

Programmer Response: Correct the syntax of the control keyword statement in the skeletal JCL member, and reissue the GENJCL command.

Problem Determination: 2, 3, 8, and a listing of the skeletal JCL member.

DSP0328I statement type CONTROL KEYWORD MISSING IN SKELETAL JCL MEMBER member name DD NAME ddname

Explanation: One of the following problems occurred during the processing of the identified skeletal JCL member:

- A %select or a %delete control keyword statement was detected without a corresponding %endsel or %enddel control keyword statement.
- A %endsel or a %enddel control keyword statement was detected without a corresponding %select or a %delete control keyword statement.

The skeletal JCL member was obtained from the skeletal JCL data set identified by the specified ddname.

System Action: Processing of the GENJCL command is terminated, and subsequent commands are not processed.

Programmer Response: Add the missing control statement to the skeletal JCL member, and reissue the command.

Problem Determination: 2, 3, 8, and a listing of the skeletal JCL member.

DSP0329I INVALID NESTING OF statement type CONTROL KEYWORDS IN SKELETAL JCL MEMBER member name DD NAME ddname

Explanation: During the processing of the identified skeletal JCL member, nested control keyword statements were found. This means that two %delete or two %select statements were specified without an intervening %enddel or %endsel statement. While %delete groups can be contained within a %select group, and vice versa, neither %delete nor %select groups can be nested. The skeletal JCL member was obtained from the skeletal JCL data set identified by the specified ddname.

System Action: Processing of the GENJCL command is terminated, and subsequent commands are not processed.

Programmer Response: Correct the skeletal JCL member, and reissue the GENJCL command.

Problem Determination: 2, 3, 8, and a listing of the skeletal JCL member.

DSP0330I INVALID SKELETAL JCL ASSIGNMENT RECORD IN SKELETAL JCL MEMBER member name DD NAME ddname RECORD NUMBER nnn

Explanation: During the processing of the identified skeletal JCL default member, an invalid assignment statement was found on record nnn. The skeletal JCL

default member was obtained from the skeletal JCL data set identified by the specified ddname.

System Action: Processing of the GENJCL command is terminated, and subsequent commands are not processed.

Programmer Response: Correct the assignment statement, and resubmit the GENJCL command.

Problem Determination: 2, 3, 8, and a listing of the skeletal JCL member.

DSP0331I CA EXECUTION IS NOT THE LATEST

Explanation: A NOTIFY.CA command was entered that specified a STOPTIME that is equal to or earlier than two or more CA records.

System Action: The command fails and any subsequent commands are not processed.

Programmer Response: If the command was entered correctly, use the DELETE.CA command to delete the CA records that are more recent than the CA record associated with the NOTIFY.CA command.

Problem Determination: This message is informational only.

Module: DSPURT30

DSP0332I NO rtype RECORDS SATISFY THE SELECT GROUP SELECTION CRITERIA

Explanation: During GENJCL.USER, a select group is processed that returns no records because the selection criteria is not satisfied. 'rtype' is the RECON record type that was to be selected. The 'rtype' value is one of the following:

ALLOC
Allocation

CA Change accumulation data set

DBDS Database data set

IC Image copy data set

OLDS Online log data set

RLDS Primary recovery log data set (PRILOG)

SRLDS Secondary recovery log data set (SECLOG)

SLDS Primary system log data set (PRISLDS)

SSLDS Secondary system log data set (SECSLDS)

System Action: Processing of the GENJCL command continues. The command completion code is set to 4. If the GENJCL command is run against a CA group or DBDS group, each member in the group is processed individually and this message is received for each member to which it applies.

User Response: This message is issued for informational purposes only. The select group's selection criteria might need modification to ensure the desired output.

DSP0340I ALLOCATION DURING THE TIME RANGE OF THE COMPRESSED LOG DATA SET ENTRY NOT ALLOWED, RECORD TIME=timestamp

Explanation: The NOTIFY.ALLOC command was issued to add allocation information for the log with the identified start time. However, the allocation time falls within the time range of compressed data set entry. This is not allowed because the compressed data set entry represents log data sets that were determined to be no longer necessary for recovery.

System Action: The command failed and subsequent commands were not processed.

Programmer Response: Correct and reissue the command, if appropriate, and reissue any other commands not processed.

Problem Determination: 2, 3, 8, and listings of the RECON data set.

DSP0347I THE RESTORE PARAMETER IS REQUIRED TO GENERATE RECOVERY JCL FOR THE NON-RECOVERABLE AREA DBD=*dbname* AREA=*areaname*

DSP0347I THE RESTORE PARAMETER IS REQUIRED TO GENERATE RECOVERY JCL FOR THE NON-RECOVERABLE DBDS DBD=*dbname* DDN=*ddname*

Explanation: A GENJCL.RECOV command without the RESTORE parameter was issued for the identified nonrecoverable database data set (DBDS) or area data set either as a single command or as part of an explicit or implicit group invocation.

System Action: If a single GENJCL.RECOV command was entered, the command terminates. If the command was part of an explicit or implicit group invocation, the JCL is not generated for this DBDS or area, but the command runs for the other group members.

Programmer Response: If the GENJCL.RECOV command must be issued for this DBDS or area, enter the command with the RESTORE parameter.

Module: DSPJCMAI, DSPJCRCV

Problem Determination: 1, 2, 3, 8, 40

DSP0348I THE RESTORE PARAMETER MAY NOT BE SPECIFIED FOR GENERATING RECOVERY JCL FOR THE AREA DBD=*dbname* AREA=*areaname*

DSP0348I THE RESTORE PARAMETER MAY NOT BE SPECIFIED FOR GENERATING RECOVERY JCL FOR THE DBDS DBD=*dbname* DDN=*ddname*

Explanation: A GENJCL.RECOV command with the RESTORE parameter was issued for the identified normal or recoverable database data set (DBDS) or area data set either as a single command or as part of an explicit or implicit group invocation.

System Action: If a single GENJCL.RECOV command was entered, the command is terminated. If the command was part of an explicit or implicit group invocation, the JCL is not generated for this DBDS or area, but the command is executed for the other group members.

Programmer Response: If the GENJCL.RECOV command must be issued for this DBDS or area, enter the command without the RESTORE parameter.

Problem Determination: 2, 3, 8 and a listing of the RECON data sets.

DSP0349I THE FOLLOWING RECORD SHOULD NOT BE ADDED FOR A NON-RECOVERABLE DATABASE. RECORD TYPE=record type

Explanation: You should not add the identified record to a nonrecoverable database data set (DBDS) or a Fast Path user-recoverable Area. The NOTIFY command detected this record.

System Action: The command failed.

Programmer Response: Check the DBDS id in the NOTIFY command to verify the recoverability of the DBDS.

Problem Determination: 2, 3

DSP0351I ddname DD INFORMATION IS INCONSISTENT WITH RECON

Explanation: The information supplied on the identified DD statement is inconsistent with related information in the RECON data sets. The information in the RECON data sets appears in the message, and is for the field-name (for example, DSNAME, FILE SEQ NUMBER, VOLUME, or VOLUME SER NUMBER) and the expected field value.

DBRC checks the generated JCL statements to see if the information in the RECON data set is the same at execution time. If changes in RECON occur between JCL generation and execution, this message appears.

This error can also occur if a cataloged multi-volume data set is sequenced apart by DBRC because NOCATDS is specified. In the message text, a data set, unrelated to the different volumes, separates the volumes, and that data set is flagged in error. The data sets associated with the DDNAME in the message will match the DD concatenation list.

This message is also issued by the Database Image Copy 2 utility if the Same Data Set option was specified for a DBDS that is defined in the RECON with the REUSE attribute. The Same Data Set option is not allowed in this case.

System Action: This command failed, and subsequent commands were not processed.

User Response: Determine the cause of the inconsistency and either correct the DD statement or correct the RECON data set.

If information in the RECON changed before JCL was executed, resubmit the GENJCL job and execute.

Problem Determination: 2, 3, 8, and listings of the RECON data set.

DSP0352I ddname DD INFORMATION IS INCOMPLETE

Explanation: The information supplied on the identified DD statement is consistent with the RECON data sets, but it is insufficient to perform the utility function requested (for example, for the Database Recovery utility to restore a database data set to its requested state). The last information that was supplied for the specified DD statement is listed. This information is followed by the additional information that is required (as defined in the RECON data set) and is identified in the message as the field-name (for example, DSNAME, FILE SEQ NUMBER, VOLUME, or VOLUME SER NUMBER) and the expected field value.

System Action: Utility processing was terminated.

User Response: Supply in the JCL for the utility the additional input identified in the message, and rerun the utility.

Problem Determination: 2, 3, 8, and listings of the RECON data set.

DSP0370I AMS REPRO FUNCTION COMPLETE, AMS RETURN CODE=code

Explanation: DBRC invoked the Access Method Services REPRO command and regained control with the indicated return code. The condition code returned by DBRC is the highest return code returned by Access Method Services.

System Action: Normal processing continues.

User Response: None

Problem Determination: 2, 3, 8, and listings of the RECON data set

DSP0379I INSUFFICIENT DD INFORMATION TO COMPLETE THE AMS REQUEST

Explanation: DBRC attempted to perform the Access Method Services REPRO function and determined from the input control statement that DD statements required for the request are not included in the JCL. The ending condition code is 4.

System Action: The BACKUP.RECON request terminates.

User Response: Ensure that the necessary DD statements are included. For example, if BACKUP.RECON RECON1 is the input control statement, BACKUP1 DD and RECON1 DD statements are required.

Problem Determination: 2, 3, 8, and listings of the RECON data set.

DSP0380I RECONx COPY TO RECONy STARTED.

Explanation: The RECON data set identified as RECONx is being copied to the data set identified as RECONy. This can occur as the result of:

- Initialization of DBRC with one RECON (COPY1) and at least one spare RECON data set
- A `CHANGE.RECON DUAL` command
- A `CHANGE.RECON REPLACE(RECONn)` command
- An I/O error on one of the RECON data sets

If the copy operation completes successfully, the data set being copied to will be the COPY2 RECON data set, and the data set being copied from will be the COPY1 RECON data set. If the copy operation does not complete successfully, the COPY1 and COPY2 RECON data sets will remain as they were before the operation started. For situations (1) and (2) above, one spare RECON will be used, and the end result will be two active RECONs (COPY1 and COPY2). If there were two spare RECON data sets, the end result will be two active RECONs and one spare RECON data set. For the other situations (3 and 4), the spare will be used, and the RECON data set not involved in the copy operation will be discarded.

System Action: Processing continues.

Programmer Response: If necessary, delete and redefine the discarded data set to make a spare RECON available again.

Problem Determination: 2, 3, 8, and a listing of the RECON data set.

DSP0381I COPY COMPLETE, RC = nnn

Explanation: This message indicates the completion of a RECON copy operation (refer to message DSP0380I). If the return code is not zero, a previous message will have identified the problem. When the return code is nonzero:

- If the operation was initiated as the result of an I/O error, there is now only one active RECON data set.
- If the operation was the result of a `CHANGE.RECON REPLACE(RECONn)` command, the command fails, and the original RECONs remain unchanged.
- If the operation occurred during DBRC initialization and there was only one spare RECON, continuation depends on whether STARTNEW or NONEW was the option chosen for starting new jobs. If NONEW was specified, this job will be terminated. If there were two empty data sets available, a new copy operation will be initiated using the other spare RECON.

See message DSP0380I for expected results if the return code is zero.

System Action: Processing continues unless the nonzero return code occurred during DBRC initialization with only one active RECON data set and NONEW is the option chosen for job processing.

Programmer Response: If the return code is nonzero, a previous error message will have indicated the necessary response.

Problem Determination: 2, 3, 8, and a listing of the RECON data set.

DSP0387W WARNING: *rrrrrrrr* SIZE ALERT RECORD LENGTH = *lllllll ppp*% OF RECORDSIZE *ssssssss* SSID = *iiiiiiii* STARTIME = *ttttttt*

Explanation: The message is issued when an OLDS is opened or when the system switches from one OLDS to another. The message indicates that when all active OLDS data sets have been archived, the size of the indicated record will exceed the values set by the `SIZALERT` parameter of the `CHANGE.RECON` command.

In the message text:

rrrrrrrr The log record type, which can be: PRILOG, SECLOG, PRISLD, SECSLD, PRTSLD, or SETSLD.

lllllll The log record's size in decimal.

ppp The log record's percentage of the maximum size.

ssssssss The maximum size allowed for a log record.

iiiiiiii The IMS subsystem the log record is associated with.

ttttttt The start time of the log record.

System Action: Processing continues.

User Response: Determine if intervention is necessary to avoid terminating IMS. If message

DSP0287W is issued, intervention is not possible.

Module: DSPOLD00

DSP0388I SSID=*ssidname* FOUND

DSP0388I *nnnn* SSYS RECORD(S) IN THE RECON AT RECONFIGURATION

Explanation: During RECON reconfiguration, DBRC identified subsystems where an action might be required before for the subsystem recognizes the reconfiguration.

The list of subsystems does not include the subsystem that detected the reconfiguration. Also, the list of subsystems does not necessarily contain all subsystem records that exist in the RECON.

In the message text:

ssidname
The subsystems requiring action.

nnnn The number of subsystem records found in the RECON requiring action.

For example, the following messages might be issued:

```
DSP0380I  RECON2   COPY TO RECON3   STARTED
DSP0388I  SSID=IMS1     FOUND
DSP0388I  0001 SSYS RECORD(S) IN THE RECON
          AT RECONFIGURATION
DSP0381I  COPY COMPLETE, RC = 000
```

System Action: Processing continues.

User Response: None This is an informational message only. See associated messages DSP0380I and DSP0381I.

Module: DSPURI20

DSP0501I NUMBER OF PREDEFINED DATA SETS DOES NOT AGREE WITH JCL

Explanation: The number of image copy data sets predefined in the RECON data set does not agree with the number of image copies requested in the Image Copy utility's job control language statements.

System Action: The Image Copy utility request was not processed.

User Response: Correct the inconsistency by changing the JCL statements or changing the number of image copy data sets predefined in the RECON data sets.

Problem Determination: 2, 3, 8, and listings of the RECON data set.

DSP0502I IMAGE COPY OF A KSDS INDEX NOT SUPPORTED IN RECON

Explanation: A request to make an image copy data set from the index of a VSAM key-sequenced data set (KSDS) will be performed. However, the existence of the image copy data set will not be recorded in the RECON data set, because information about the index portion of VSAM key-sequenced data sets is not recorded in the RECON data sets.

System Action: The Image Copy utility or the Online Image Copy utility continued to process the request. No information was acquired from or written to the RECON data set.

User Response: None

Problem Determination: 2, 3, 8

DSP0503I IMAGE COPY OUTPUT DD STATEMENT IS MISSING OR DUMMY

Explanation: The DD statement required to identify the output data set for the Image Copy utility or the Online Image Copy utility was not specified, or has been specified as dummy. These utilities require that the output DD statement be specified, and that it identify an existing data set.

System Action: The Image Copy utility or the Online Image Copy utility failed.

User Response: Properly specify the DD statement for the output data set, and rerun the job.

Problem Determination: 8

DSP0510I THE DBDS/AREA HAS NEVER BEEN INITIALIZED DBD=*dbdname* DDN=*ddname*

Explanation: An image copy was attempted at a tracking site for a DBDS or area that has never been initialized.

System Action: Processing by the image copy utility terminates with a return code 16.

System Operator Response: Receive the DBDS or area and try again.

Module: DSPUIC00

DSP0511I UNABLE TO DETERMINE EFFECTIVE IMAGE COPY TIME DBD=*dbdname* DDN=*ddname*

Explanation: An image copy was attempted at a tracking site, but DBRC could not determine the effective time for the IC. This can happen, for example, when a database is defined as RCVTRACK and no updates have been received.

System Action: Processing by the image copy utility

terminates with a return code 16.

System Operator Response: None. No image copy is necessary.

Module: DSPUIC00

DSP0512I IMAGE COPY RECORD ALREADY EXISTS DBD=*dbdname* DDN=*ddname* TIME=*timestamp*

Explanation: An image copy was attempted at a tracking site, but an IC already exists with the same time as DBRC has determined to be the effective time for this IC. Since DBRC does not allow two image copies with the same time, this job is terminated.

System Action: Processing by the image copy utility terminates with a return code 16.

System Operator Response: None. No additional image copy is necessary.

Module: DSPUIC00

DSP0701I MEMBER OF CHANGE ACCUMULATION GROUP NOT FOUND IN RECON CAGRP=name DBDNAME=dbdname DDNAME=ddname

Explanation: A record for the identified change-accumulation group indicates that the identified database data set or area data set is a member of that change-accumulation group. The RECON data set, however, does not contain a header record for the identified database data set or area data set. This indicates an inconsistency in the RECON data set.

System Action: Processing by the Change Accumulation utility was terminated.

User Response: Obtain a list of the RECON data sets to determine where the inconsistency exists. If the database data set was deleted with a `DELETE.DBDS` command or if the area data set was deleted with a `DELETE.ADS` command, the corresponding field in the change-accumulation group record should have been reset to binary zeros. Correct the inconsistency in the RECON data set, and rerun the job.

Problem Determination: 2, 3, 8, and listings of the RECON data set.

DSP0702I CHANGE ACCUMULATION GROUP RECORD NOT FOUND IN RECON CAGRP=cagrpnme DBDNAME=dbdname DDNAME=ddname

Explanation: A record of the identified change-accumulation group *cagrpnme* was not found in the RECON data set, which indicates an inconsistency in that data set.

System Action: Processing by the Change Accumulation utility was terminated.

User Response: Obtain a list of the RECON data sets to determine where the inconsistency exists. If the change-accumulation group was deleted with a `DELETE.CAGRP` command, the corresponding field in the header record of each member database data set or area data set should have been reset to binary zeros. Correct the inconsistency in the RECON data set, and rerun the job.

Problem Determination: 2, 3, 8, and listings of the RECON data set

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DSP0703I DATABASE DATA SET NOT DEFINED IN CHANGE ACCUMULATION GROUP CAGRP=cagrpnme DBDNAME=dbdname DDNAME=ddname

Explanation: The Change Accumulation utility was processing the identified change-accumulation group. A SYSIN statement specified that changes were to be accumulated for the identified database data set or area data set, which is not a member of the change-accumulation group being processed. The first database data set or area data set specified on a SYSIN control statement determines which change-accumulation group is to be processed. The identified database data set or area data set is either a member of a different change-accumulation group, or it is not a member of any change-accumulation group (in which case the *cagrpnme* field in the message contains ********).

System Action: Processing by the Change Accumulation utility was terminated.

User Response: Correct the SYSIN control statement. All database data sets or area data sets specified in the SYSIN control statements for a one execution of the Change Accumulation utility must be either (1) not defined in the RECON data set, or (2) defined in the RECON data set and be members of the same change-accumulation group.

Problem Determination: 2, 3, 8, and listings of the RECON data set

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DSP0704I DATABASE DATA SET ALREADY SPECIFIED DBDNAME=dbdname DDNAME=ddname

Explanation: The identified database data set was specified on more than one SYSIN control statement for an execution of the Change Accumulation utility.

System Action: Processing by the Change Accumulation utility was terminated.

User Response: Eliminate the duplication in the SYSIN control statements, and rerun the job.

Problem Determination: 2, 3, 8

DSP0705I CHANGE ACCUMULATION INPUT INCONSISTENT WITH RECON CAGRP=name

Explanation: SYSIN input for the Change Accumulation utility is inconsistent with information in the RECON data set in one of the following ways:

- Some members of the identified Change Accumulation group were not specified in the SYSIN control statements, or
- Some database data sets specified in the SYSIN control statements are not defined in the RECON data set.

System Action: Processing by the Change Accumulation utility was terminated.

User Response: Correct the SYSIN control statements so that they include the names of all and only those database data sets that are members of the identified change-accumulation group.

Problem Determination: 2, 3, 8, and listings of the RECON data set.

DSP0706I IMAGE COPY NOT FOUND IN RECON FOR DBDNAME=dbdname DDNAME=ddname

Explanation: Changes could not be accumulated for the identified database data set (DBDS) or area data set (ADS) because there is no record of a usable image copy data set in the RECON data set for the DBDS/ADS. The Change Accumulation utility uses the timestamp of an image copy data set to determine which change records to accumulate.

System Action: If received during the GENJCL.CA process, then processing continues but the identified DBDS/ADS is removed from the generated JCL. If received during execution of the Change Accumulation utility, then processing terminates.

User Response: If received during the GENJCL.CA process, add the appropriate image copy information to the RECON data set. Reissue the `GENJCL.CA` command.

If received during execution of the Change Accumulation utility, the state of the RECON data set has changed between the JCL generation and the JCL execution. Reissue the `GENJCL.CA` command.

Problem Determination: 2,3,8, and listings of RECON data set.

DSP0707I generic-name INPUT IS NOT ALLOWED - ddname DD STATEMENT IS NOT DUMMY CAGRP=name

Explanation: A request to run the Change Accumulation utility for the identified change-accumulation group does not allow the input identified by generic-name (for example, CHANGE ACCUMULATION, or LOG TAPE). The corresponding DD statement for the data set ddname must be specified as dummy, or omitted.

System Action: The utility request was not processed.

User Response: Omit the identified DD statement or change it to dummy, and reissue the request.

Problem Determination: 2, 3, 8, and listings of the RECON data set.

DSP0708I DDNAME MUST BE SPECIFIED FOR DBDNAME=dbdname

Explanation: A DB0 SYSIN control statement for the Change Accumulation utility contains the database name identified in the message, but does not contain a corresponding data set ddname. The Database Recovery Control requires that both the database name and the data set ddname be specified for the DB0 control statements of the Change Accumulation utility.

System Action: Processing by the Change Accumulation utility was terminated.

User Response: Add the needed ddnames to the DB0 control statement in error, and rerun the Change Accumulation utility.

Problem Determination: 2, 3, 8

DSP0709I NO IMAGE COPY OBTAINED FOLLOWING REORGANIZATION DBDNAME=dbdname DDNAME=ddname

Explanation: If this message was received during the GENJCL.CA process, a reorganization of the identified database data set (DBDS) or area data set (ADS) was recorded in the RECON data set, but there is no record of a usable image copy data set created since that reorganization. The Change Accumulation utility uses the time stamp of an image copy data set to determine which change records to accumulate.

If this message was received during execution of the Change Accumulation utility, a reorganization of the identified database data set (DBDS) or area data set (ADS) was recorded in the RECON data set after the GENJCL.CA process completed. The time stamp previously selected by GENJCL.CA is no longer valid.

System Action: If received during the GENJCL.CA process, then processing continues but the identified DBDS/ADS is removed from the generated JCL job. If received during execution of the Change Accumulation utility, then processing terminates.

User Response: If received during the GENJCL.CA process, run the image copy utility to create a record of a usable image copy data set after the REORG record in the RECON data set. Reissue the `GENJCL.CA` command.

If received during execution of the Change

Accumulation utility, the state of the RECON data set has changed between the JCL generation and the JCL execution. Reissue the GENJCL.CA command.

Problem Determination: 2, 3, 8, and listing of the RECON data set.

DSP0710I DB0 *ALL OPTION NOT ALLOWED

Explanation: The *ALL parameter was specified on a DB0 SYSIN control statement or was defaulted for an execution of the Change Accumulation utility. This option is not valid when the IMS Database Recovery Control is installed.

System Action: Processing by the Change Accumulation utility was terminated.

User Response: Replace the *ALL specification on the DB0 SYSIN control statement with DB0 control statements containing the names of the database data sets to be processed.

Problem Determination: 2, 3, 8, and listings of the RECON data set.

DSP0711I SPECIFIED PURGETIME IS NOT THE CURRENT IMAGE COPY TIME DBDNAME=dbdname DDNAME=ddname

Explanation: The purge time specified in the SYSIN control statement for the identified database data set or area data set is not the current timestamp of an image copy data set and it must be.

System Action: Processing by the Change Accumulation utility was terminated.

User Response: Correct the PURGETIME parameter so that it specifies the timestamp of the most recent image copy data set.

Problem Determination: 2, 3, 8, and listings of the RECON data set

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DSP0712I NO INPUT TO PROCESS FOR CHANGE ACCUMULATION GROUP CAGRPname

Explanation: The most recent change records available have already been processed by the Change Accumulation utility for all database data sets in the change-accumulation group.

System Action: The Change Accumulation utility terminated without processing any change-accumulation data sets.

User Response: If a database has been added to the CA group, then there may be change records that need to be processed for that added member. However, the resultant CA would be invalid since its STOPTIME would be earlier than the last CA created. You should either delete the most recent CA record from RECON or wait for additional updates to occur to a member in the CAGRP.

Problem Determination: 2, 3, 8, and listings of the RECON data set.

DSP0713I DATABASE DATA SETS BEING PROCESSED ARE NOT DEFINED IN RECON

Explanation: The database data sets for which change records are being accumulated are not defined in the RECON data set. No checking of the data sets used as input to the utility is performed, and no results are recorded in the RECON data set.

System Action: The Change Accumulation utility continued processing.

User Response: None

Problem Determination: 2, 3, 8, and listings of the RECON data set.

DSP0802I IMAGE COPY INPUT IS REQUIRED FOR RECOVERY

Explanation: A SYSIN control statement (or USEDBDS/USEAREA parameter on the GENJCL.RECOV command) for the Database Recovery utility indicates that an image copy data set is not to be used as input to the recovery action. This is a valid option if this recovery request was preceded by a successful timestamp recovery, and only changes that occurred since the time to which the database data set was recovered are to be applied. The Database Recovery utility determined, however, that either changes were made to the database data set since the previous timestamp recovery, or the previous recovery restored the database data set to a time that is within another timestamp recovery range. Therefore, a full recovery using an image copy data set is required.

System Action: The Database Recovery utility terminates processing for the DBDS that is being processed. If recovery for a DBDS group is requested, processing continues for the remaining members of the group.

User Response: Change the SYSIN control statement (or the GENJCL command) to request a full recovery, and run the job again.

Problem Determination: 2, 3, 8, and listings of the RECON data set.

DSP0804I DATABASE DATA SET REORGANIZED timestamp

Explanation: The recovery of a database data set to a particular timestamp was requested. This is not possible, because the specified timestamp requires that data sets used in recovery were created both before and after a reorganization of the database data set be

used as input to the Database Recovery utility. The timestamp of the reorganization appears in the message.

System Action: Processing by the Database Recovery utility was terminated.

User Response: Select a timestamp prior to the reorganization or one that requires only information recorded after the reorganization; recover the database data set to that timestamp. If the database data set is to be recovered to its state prior to the reorganization, the DBDLIB might require changes if the reorganization changed information that is maintained in the DBDLIB data set.

Problem Determination: 2, 3, 8, and listings of the RECON data set.

DSP0805I generic-name INPUT IS NOT ALLOWED - ddname DD STATEMENT IS NOT DUMMY

Explanation: The input identified by the generic-name field (IMAGE COPY, CHANGE ACCUMULATION, or LOG TAPE) is not allowed as input to this execution of the Database Recovery utility. The DD statement that is identified by the ddname field is not DUMMY and must be, unless it is omitted.

System Action: Processing by the Database Recovery utility was terminated.

User Response: Change the identified DD statement to DUMMY (or omit it), and rerun the job.

Problem Determination: 2, 3, 8, and listings of the RECON data set.

DSP0806I PARTIAL RECOVERY OPTION INVALID FOR TRACK RECOVERY

Explanation: Conflicting information was supplied on a SYSIN control statement for the Database Recovery utility. Column 2 of the statement contained a T, indicating a request for a track recovery; columns 31 through 43 of the same statement contained either a timestamp or a comment, indicating a request for a timestamp recovery. Track recovery and timestamp recovery are mutually exclusive.

System Action: Processing by the Database Recovery utility was terminated.

User Response: Decide which type of recovery the Database Recovery utility is to perform, and change the SYSIN control statement appropriately; then rerun the job.

Problem Determination: 2, 3, 8, and listings of the RECON data set.

DSP0807I NO IMAGE COPY OPTION INVALID FOR TRACK RECOVERY

Explanation: The SYSIN control statement for the Database Recovery utility contains both (1) a C in column 44, which indicates that an image copy data set is not to be used as input, and (2) a T in column 2, which indicates that track recovery is requested. A track recovery request requires that an image copy data set be used as input.

System Action: Processing by the Database Recovery utility was terminated.

User Response: Determine the type of recovery to be performed and remove either the T from column 2 or the C from column 44 of the SYSIN control statement; then rerun the job.

Problem Determination: 2, 3, 8, and listings of the RECON data set.

DSP0808I RECOVERY OF A KSDS INDEX NOT SUPPORTED IN RECON

Explanation: The Database Recovery utility processed a request to recover the index of a VSAM key-sequenced data set (KSDS). Since information about the index portion of VSAM key-sequenced data sets is not maintained in the RECON data set, the feature is not involved in any way in the recovery action.

System Action: Processing of the recovery request continued. No information was acquired from or written to the RECON data set.

User Response: None

Problem Determination: 2, 3, 8

DSP0809I SPECIFIED TIMESTAMP timestamp IS INVALID

Explanation: The identified timestamp, which was specified in a SYSIN control statement, is invalid; either it contains invalid characters, or its value is not within the allowable ranges. Allowable ranges are defined in the description of the `GENJCL.RECOV` command.

System Action: Processing by the Database Recovery utility was terminated.

User Response: Correct the timestamp, and reissue the command.

Problem Determination: 2, 3, 8, and listings of the RECON data set.

DSP0810I REQUIRED CHANGE ACCUMULATION INPUT NOT FOUND FOR TRACK RECOVERY

Explanation: A track recovery request always requires a change-accumulation data set as input, but the RECON data sets have no record of a

change-accumulation data set for the specified database data set since its last image copy data set.

System Action: Processing by the Database Recovery utility was terminated.

User Response: Execute the Change Accumulation utility to obtain the required change-accumulation data set if a track recovery is to be performed, or perform a full recovery of the database data set.

Problem Determination: 2, 3, 8, and listings of the RECON data set.

DSP0812I USER HAS SPECIFIED A NULL RECOVERY REQUEST

Explanation: The recovery of a database data set (DBDS) was requested without using an image copy data set as input. This is a valid option following a timestamp recovery. The Database Recovery utility determined that the specific DBDS being recovered has not been allocated since its last timestamp recovery. With no image copy data set and no allocations, this means that no inputs exist from which to perform the recovery.

System Action: The Database Recovery utility terminates processing for the DBDS that is being processed. If recovery for a DBDS group is requested, then processing continues for the remaining members of the group.

User Response: Determine if the SYSIN control statement is correct. If not, correct the input and rerun the job.

Problem Determination: 2, 3, 8, and listings of the RECON data set.

DSP0813I DATABASE CHANGES MAY EXIST BEYOND CHANGE ACCUMULATION

Explanation: The RECON data set has records of more recent log volumes than those processed in the latest change-accumulation data set that was used for the requested track recovery. The recovered tracks might not include the most recent changes that were made to their equivalents in the database data set prior to the recovery action.

System Action: Processing by the Database Recovery utility continued.

User Response: Execute the Change Accumulation utility to incorporate the most recent changes into a change-accumulation data set, and rerun the track recovery so that it includes the most recent changes.

Problem Determination: 2, 3, 8, and listings of the RECON data set.

DSP0814I DATABASE DATA SET NOT FOUND IN CHANGE ACCUMULATION GROUP CAGRP=name

Explanation: During an execution of the Database Recovery utility, conflicting information was found in the RECON data set about change-accumulation data sets to be used in the recovery of a database data set. The DBDS record in the RECON data set specifies that the database data set to be recovered is a member of the change-accumulation group that is identified in the message. The change-accumulation-group record in the RECON data set, however, does not indicate that the database data set is a member of the change-accumulation group.

System Action: Processing by the Database Recovery utility continued without using change-accumulation data sets as input.

User Response: Obtain a listing of the RECON data sets to determine where the conflicting information is. To correct the problem, first delete the change-accumulation group, which deletes all existing change-accumulation data sets for the change-accumulation group. Then redefine the change-accumulation group and the corresponding change-accumulation data sets (now considered empty) in the RECON data sets. Then rerun the job that failed.

Problem Determination: 2, 3, 8, and listings of the RECON data set.

DSP0815I NO USABLE IMAGE COPY AVAILABLE FOR RECOVERY

Explanation: The recovery request cannot be performed because no usable image copy data set exists from which to restore the database data set to the desired state. The use of a user image copy (nonstandard image copy) cannot be used for recovery. See the note under User Response.

System Action: Processing by the Database Recovery utility was terminated.

User Response: Determine from the RECON data sets if any image copy data set exists for the database data set. If one does exist, then either it is not usable due to previous timestamp recoveries of the database data set, or it is not usable because it is marked invalid. Specify a different timestamp to which to recover the database data set, so that a valid image copy data set will be selected; rerun the job. To recover a database with a nonstandard image copy, first restore the DBDS from the nonstandard image copy. Then, enter a `NOTIFY.RECOV` command with specified RCVTIME (IC run time) to record this restoration in RECON. Issue the `GENJCL.RECOV` command with the specified USEDBDS parameter. JCL is generated to add changes to the database in its current state.

Problem Determination: 2, 3, 8, and listings of the RECON data set

DSP0816I INVALID RECOVERY OPTION SPECIFIED IN CONTROL STATEMENT

Explanation: Column 57 of the SYSIN control statement for the Database Recovery utility contains neither a C nor a blank.

System Action: Processing by the Database Recovery utility was terminated.

User Response: Correct the error on the control statement, and rerun the job.

Problem Determination: 2, 3, 8, and listings of the RECON data set.

DSP0817I CHANGE ACCUMULATION GROUP RECORD NOT FOUND IN RECON CAGRP=name

Explanation: During the recovery of a database data set, the header record of the database data set indicated that it was a member of the change-accumulation group that is listed in the message, but that change-accumulation group does not exist in the RECON data set. This indicates an inconsistency in the RECON data set.

System Action: Processing by the Database Recovery utility was terminated.

User Response: Obtain a listing of the RECON data set to determine where the inconsistency exists. Use whatever commands of the Recovery Control utility are needed to restore the RECON data sets to a consistent state before rerunning the failing job.

Problem Determination: 2, 3, 8, and listings of the RECON data set.

DSP0818I LOGS USED FOR PRIOR RECOVERY ARE NOT USABLE

Explanation: DBRC cannot determine if the database data set being recovered will be restored properly due to the following sequence of prior events:

- A timestamp recovery was performed for the database data set using a certain set of log volumes (usually primary log volumes).
- An image copy was not made of the database data set following the timestamp recovery.
- One or more of the log volumes used in the timestamp recovery was marked in the RECON data set as having an I/O error.
- Changes were made to the database data set.
- The recovery request being processed is supposed to restore the database data set to a timestamp beyond that of the prior timestamp recovery. The problem in this set of circumstances is one of the potential for losing the effects of the prior partial recovery.
- In dual logging mode, a change-accumulation data set required for recovery contains a PRILOG entry that has been marked in error since the execution of the Change Accumulation utility.

The current recovery request will be processed as follows:

- The most recent image copy preceding the timestamp recovery will be used.
- Because of the I/O errors on the log volumes used for the timestamp recovery, a different set of log volumes will be used (usually the secondary log volumes). The primary and secondary log volumes of IMS are not synchronized at end-of-volume; it is thus possible for database changes to exist on the new set of log volumes used in the current recovery request that did not exist on the volumes used in the timestamp recovery request. The final result is that the recovered database data set might not reflect the results of the prior timestamp recovery.
- The SECLOG entry for the PRILOG entry that was marked in error will be included in the generated JCL.

System Action: Processing by the Database Recovery utility continued.

User Response: Examine the restored database data set to ensure that it has been recovered to the desired state.

Problem Determination: 2, 3, 8, and listings of the RECON data set.

DSP0819I RECOVERY REQUEST REQUIRES AN OPEN LOG VOLUME

Explanation: The recovery request requires a log volume for which no volume stop-time has been recorded in the RECON data set. A volume is not considered usable in a recovery until a stop time has been recorded for it in the RECON data set.

System Action: Processing by the Database Recovery utility was terminated.

User Response: If the volume was terminated properly without a record of the termination being added to the RECON data set, use a `CHANGE.PRILOG` or `CHANGE.SECLOG` command to add this information to the RECON data set.

Problem Determination: 2, 3, 8, and listings of the RECON data set.

DSP0821I TRACK RECOVERY OPTION INVALID FOR NON-VSAM DATA SET

Explanation: A control statement for the Database Recovery utility requested a track recovery. The recovery cannot be performed because the database data set for which the track recovery action was requested is not a VSAM data set.

System Action: Processing by the Database Recovery utility was terminated.

User Response: If the database data set was incorrectly specified, correct the control statement. If the database data set was correctly specified, and recovery is required due to a permanent I/O error in it, request a full recovery on the control statement for the Database Recovery utility. In either case, rerun the job after correcting the control statement.

Problem Determination: 2, 3, 8, and listings of the RECON data set.

DSP0822I RECOVERY REQUESTED TO TIMESTAMP *timestamp* **DBD=dbdname xxxx=name**

Explanation: This message indicates that an execution of the Database Recovery utility has requested a recovery to the specified timestamp. If xxxx is AREA, then name is the area name. If xxxx is DDN, then name is the ddn name.

System Action: Processing continues.

User Response: None

Problem Determination: 2, 3, 8, and listings of the RECON data set.

DSP0823I RECOVERY REQUEST INCONSISTENT WITH RECON ALLOC RECORD OF ALLOCTIME *timestamp*

Explanation: During the processing of a recovery request to a specified timestamp, DBRC found a condition in the RECON data set that was inconsistent with the requested recovery. The conditions that can cause this message to be issued are:

- An ALLOC record was found for a PRILOG record that contains updates that span the requested recovery time.
- An ALLOC record was found for a PRILOG record whose stop time or volume end time is after the requested recovery time, and updates have been made between the requested recovery time and the PRILOG stop time or volume end time.

The message identifies which allocation record to use to determine the inconsistency.

User Response: Use the allocation time, the requested recovery time, and a listing of the RECON data set to determine the inconsistency. The allocation time identifies the ALLOC record that was being processed at the time the inconsistency was detected. Use the ALLOC record start time to find its associated PRILOG record and analyze the information in these records.

Problem Determination: 2, 3, 8, and listings of the RECON data set.

DSP0828I NO USEABLE IC TO RECEIVE FOR DBD *dbdname* **DDN/AREA** *ddname/areaname*

Explanation: DBRC could not find a usable image copy while executing a `GENJCL.RECEIVE` or `NOTIFY.RECOV` command. A usable image copy has the following characteristics:

- It is not flagged as “in error.”
- It was created by the IMS batch image copy utility.
- It was created after any updates were received at the tracking site.

System Action: The command is terminated.

System Programmer Response: Create a usable image copy data set at the active site, send it to the tracking site, use `NOTIFY` to register it in RECON.

Problem Determination: 2, 3, 8, and a listing of the RECON data sets.

Module: DSPURVTN

DSP0829I NO IMAGE COPY AFTER A POINT-IN-TIME RECOVERY

Explanation: During either a `GENJCL.RECOV` command or while the database recovery utility was running, DBRC determined that input to the recovery utility (which was created previously) specifying the PITR parameter is required. As the later PITR recovery only applies committed data and might have removed any Backout records, DBRC cannot guarantee the integrity of the database. The command, the utility, or both have failed.

System Action: The `GENJCL.RECOV` command fails and subsequent commands are skipped. If the error is detected while the utility is running, recovery is terminated.

User Response: After a POINT-IN-TIME recovery, an image copy must be taken so that subsequent recoveries have a valid starting point. If you know the integrity of the database will not be compromised, delete the RECOV record by using the `DBRC DELETE.RECOV` command, then rerun the job. Otherwise, delete the RECOV record and recover the database using a database recovery service and specify the PITR parameter. For example, recreate the original PITR recovery. Then take an image copy before using the database.

Module: DSPURVIN

DSP0830I RECOVERY REQUEST INCONSISTENT WITH ONLINE REORG RUNTIME *timestamp*

Explanation: The requested recovery is invalid due to inconsistent information found in the RECON data set. One of the following occurred:

- A HALDB OLR has completed prior to the full recovery and the HALDB OLR record identified cannot be used as input to recovery.
- The recovery-to-time falls within a HALDB OLR and time stamp recoveries are not allowed

System Action: Processing is terminated. The RECON data sets are not updated. If the HALDB OLR record cannot be used as input to recovery, select a time stamp that is valid or recover the active DBDS. Choose a valid time stamp if the recovery-to-time is within an HALDB OLR.

Programmer Response: Contact the IBM Support Center if you require additional assistance.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0831I ONLINE REORG INPUT NOT VALID FOR RECOVERY

Explanation: A `GENJCL.RECOV` command specifying USEOLRRG was issued and DBRC determines that an image copy is needed instead.

System Action: Processing is terminated. The command fails. Review the RECON contents and reissue the command appropriately.

Programmer Response: Contact the IBM Support Center if you require additional assistance.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP0832I FULL RECOVERY NOT ALLOWED FOR AN INACTIVE DBDS

Explanation: A full recovery of a DBDS was requested. However, the specified DBDS is an inactive DBDS of a HALDB partition.

System Action: The `GENJCL.RECOV` command or Database Recovery utility terminates processing for the DBDS.

Programmer Response: Determine if the `GENJCL.RECOV` command or the SYSIN control statement is correct. If not, make the correction and rerun the job.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

Module: DSPURVIN

DSP0833I ONLINE REORG INPUT IS BEING USED FOR RECOVERY DBD=*dbname* DDN=*ddname*

Explanation: This message indicates that the recovery for the identified DBDS will be performed using a HALDB OLR as the starting point for recovery.

System Action: Processing continues.

Programmer Response: None.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

Module: DSPURVIN

DSP1001I GSG *gsg_name* ALREADY DEFINED

Explanation: An attempt was made to define a global service group (GSG) with the name *gsg_name*, but a GSG with the same name already exists.

System Action: The command is terminated and subsequent commands are ignored.

System Operator Response: Reissue the command with the correct GSG name.

Module: DSPURLSB

DSP1002I GSG *gsg_name* NOT DEFINED

Explanation: An attempt was made to list or delete a global service group (GSG), or otherwise access the GSG named *gsg_name*, but the GSG does not exist.

System Action: The command is terminated and subsequent commands are ignored.

System Operator Response: Reissue the command with the correct GSG name.

Module: DSPJCCEV, DSPRESET, DSPURCM8, DSPURDLB, DSPURD60, DSPURM60, DSPURM80, DSPURPLB, DSPURSLB, DSPURS00, DSPURS10, DSPURT20

DSP1003I GSG *gsg_name* HAS MAXIMUM SGS DEFINED

Explanation: An attempt was made to add a service group to the global service group (GSG) named *gsg_name*. The named GSG already has the maximum number of service groups (SGs) defined.

System Action: The command is terminated and subsequent commands are ignored.

System Operator Response: Either correct the GSG name, or delete a service group before adding a new one.

Module: DSPURSLB

DSP1004I NO GSG RECORDS FOUND IN RECON

Explanation: A `LIST.GSG ALL` or `LIST.RECON` command found no global service groups (GSGs) to be listed.

System Action: Processing continues.

Module: DSPURPLB

DSP1005I GSGNAME MUST BE SPECIFIED

Explanation: An INIT.DB command was entered with either the DBTRACK or RCVTRACK parameter, but no global service group (GSG) name was entered.

System Action: The command is terminated and subsequent commands are ignored.

System Operator Response: Either remove the RSR-related parameters or add a GSGNAME.

Module: DSPURS00, DSPURS10

DSP1006I CANNOT IC OR REORG A COVERED DB AT THE TRACKING SITE

Explanation: An attempt was made to issue a GENJCL.OIC or NOTIFY.REORG command for a database covered by a global service group (GSG) at the tracking site. A covered database cannot be image copied or reorganized at the tracking site.

System Action: The command is terminated and subsequent commands are ignored.

System Operator Response: Reissue the command with an appropriate database name.

Module: DSPURT00

DSP1007I USID PARAMETER REQUIRED FOR COVERED DATABASES

Explanation: A NOTIFY.IC, NOTIFY.UIC, or NOTIFY.ALLOC command was issued for a database or area that is covered by a global service group (GSG). In these cases, an update set identifier (USID) parameter is required.

System Action: The command is terminated and subsequent commands are ignored.

System Operator Response: Reissue the command with the required USID parameter.

Module: DSPURT00, DSPURT10, DSPURT95

DSP1009I SUBSYSTEM *ssidname* SIGNED ON TO GSG *gsg_name*- COMMAND REJECTED

Explanation: A DELETE.GSG, DELETE.SG, or CHANGE.SG command was issued for the global service group (GSG) *gsg_name* which has been signed on to by subsystem *ssidname*. All subsystems must be signed off of a GSG before it or its SG entries can be modified or deleted. Alternatively, the wrong GSG might have been specified in the command.

System Action: The command is terminated and subsequent commands are ignored.

System Operator Response: Reissue the command after all subsystems signed on to the GSG have terminated or specify the correct GSG.

Module: DSPURDLB, DSPURM80

DSP1010I SG *sg_name* ALREADY DEFINED

Explanation: An attempt was made to define a service group (SG) with the name *sg_name*, but the SG already exists.

System Action: The command is terminated and subsequent commands are ignored.

System Operator Response: Reissue the command with the correct SG name.

Module: DSPURSLB

DSP1011I SG *sg_name* NOT DEFINED

Explanation: An attempt was made to delete or modify a service group (SG) entry named *sg_name*, but the SG does not exist within the global service group (GSG) specified.

System Action: The command is terminated and subsequent commands are ignored.

System Operator Response: Reissue the command with the correct SG or GSG name.

Module: DSPURDLB, DSPURM80

DSP1012I LOCAL|NONLOCAL SG ALREADY DEFINED

Explanation: An attempt was made to define a service group (SG) as LOCAL or NONLOCAL when an SG of the designated type already exists within the global service group (GSG).

System Action: The command is terminated and subsequent commands are ignored.

System Operator Response: There can only be one LOCAL or NONLOCAL SG per GSG. Make the required corrections and reissue the command.

Module: DSPURSLB

DSP1013I ACTIVE|TRACKER SG ALREADY DEFINED

Explanation: An attempt was made to assign a service group (SG) to an ACTIVE or TRACKER role when an SG of the designated role already exists within the global service group (GSG).

System Action: The command is terminated and subsequent commands are ignored.

System Operator Response: There can only be one ACTIVE or TRACKER SG per GSG. Make the required corrections and reissue the command.

Module: DSPURSLB

DSP1014I *parameter* **PARAMETER NOT ALLOWED FOR DL/I**

Explanation: A parameter (GSGNAME, RCVTRACK, or DBTRACK) was specified on an INIT.DBDS command for a full function database. These parameters are valid only for a Fast Path area.

System Action: The command is terminated.

Programmer Response: Either use the INIT.DB command or change DBDS(...) to AREA(...).

Problem Determination: 2, 3, 8, and a listing of the RECON data sets.

Module: DSPURS00

DSP1015I **INCONSISTENT RLDS/SLDS RECORDS, SSID=***subsystem_name* **START TIME=***time*

Explanation: While processing an IMS request, DBRC found an inconsistency between an OLDS, PRILOG or PRISLDS record. *time* is the start time for the record which does exist and for which there should be (but is not) a PRILOG or PRISLDS record.

System Action: DBRC returns an error code to IMS. IMS either abends, or issues a message and abends.

Programmer Response: The inconsistency must be corrected before continuing. Initiate your service or maintenance process to diagnose and resolve the problem.

Problem Determination: 2, 3, 8, and a listing of the RECON data sets.

Module: DSPQLOGS, DSPTLG00

DSP1016I **GSG RECORD NOT FOUND, GSG NAME =** *gsg name*

Explanation: DBRC required a global service group (GSG) name from RECON during execution of a command, but the necessary GSG name could not be found.

System Action: The command is terminated and subsequent commands are ignored.

System Operator Response: Issue INIT.GSG and INIT.SG to create or correct the GSG name. Then reissue the command.

Module: DSPCHKWD, DSPTLG00, DSPTREPL, DSPURCM8, DSPURT00, DSPURT50, DSPURT55

DSP1017I **COVERED DATABASE AUTHORIZED BY A TRACKING SUBSYSTEM DBD=***database name***, SSID=***ssidname*

Explanation: During the execution of one of the following commands:

CHANGE.ADS
CHANGE.DB
CHANGE.DBDS
DELETE.ADS
DELETE.ALLOC
INIT.DBDS
NOTIFY.ALLOC
NOTIFY.RECOV

it was found that the database or area involved is covered by a global service group (GSG) and authorized by a tracking subsystem. In these circumstances, execution of the command is not permitted.

System Action: The command is terminated and subsequent commands are ignored.

System Operator Response: Wait until the database or area has no tracking subsystems authorized to it, then reissue the command.

Module: DSPCHKWD, DSPURCM8, DSPURT20

DSP1018I **GROUP** *grpname* **IS NOT A VALID DBDS GROUP**

Explanation: The identified group was initialized in RECON as a DB group or RECOV group, that is, the INIT.DBDSGROUP command was used with the DBGRP keyword or the RECOVGRP keyword. The group name specified in the GROUP keyword of a GENJCL command or a LIST.HISTORY command must be either a DBDS Group or a CA Group.

System Action: The command fails and subsequent commands are not processed.

System Operator Response: Correct the command to specify the name of a valid DBDS group. Reissue the command and any others that were not processed.

Problem Determination: 2, 3, 8, and a listing of the RECON data sets.

Module: DSPJCMAI, DSPURPHI

DSP1021I **AREA IS STILL COVERED DBD=** *database name* **AREA=** *area name*

Explanation: The CHANGE.DB command was issued with the TYPEIMS parameter to change a database from Fast Path to DL/I. All areas must be uncovered before issuing CHANGE.DB TYPEIMS.

System Action: The command is terminated and subsequent commands are ignored.

System Operator Response: Uncover the areas and reissue the command.

Module: DSPURCM8

DSP1022I LOCAL SG ROLES MUST MATCH

Explanation: The CHANGE.DB or CHANGE.DBDS command was issued to change the global service group (GSG) covering the DB or AREA; however, the local service group (SG) roles must be the same before this is allowed.

System Action: The command is terminated and subsequent commands are ignored.

System Operator Response: Make sure the local SG roles are the same before reissuing the command.

Module: DSPURCM8, DSPURM60

DSP1023I PARAMETER INVALID FOR DBD= *database name*

DSP1023I PARAMETER INVALID FOR DBD= *database name* **AREA=** *area name*

Explanation: One of the following errors occurred:

- The CHANGE.DB command was issued with the following parameters: GSGNAME, NOTCOVER, RCVTRACK, DBTRACK. These parameters are not allowed for a Fast Path DEDB.
- The CHANGE.DB command was issued with GSGNAME for a nonrecoverable or user-recoverable database which is not allowed.
- The CHANGE.DB command was issued with the TYPEFP, USERRCOV, or NONRECOV parameter on a covered DL/I database without the NOTCOVER parameter.
- The CHANGE.DB command was issued with the USERRCOV parameter on a database that is part of a change accumulation group.
- GENJCL.RECEIVE is not valid for uncovered databases or areas.
- An INIT.DB command was issued with USERRCOV for a DL/I database.
- An INIT.DBDS command was issued for a Fast Path area with one of the following parameters: GSGNAME, RCVTRACK, or DBTRACK. However, the DEDB was defined as Nonrecoverable or User-Recoverable and these parameters are not allowed for nonrecoverable or user-recoverable databases.

System Action: The command is terminated and subsequent commands are ignored.

System Operator Response: Reissue the command with the correct parameters.

Module: DSPURCM8

DSP1025I TRACKING OPTIONS INVALID FOR UNCOVERED DB/AREA DBD= *database name*

DSP1025I TRACKING OPTIONS INVALID FOR UNCOVERED DB/AREA DBD= *database name* **AREA=** *area name*

Explanation: A CHANGE.DB or CHANGE.DBDS command was issued with the following parameters: RCVTRACK or DBTRACK. These parameters are not allowed if the database or area is not covered by a global service group (GSG).

System Action: The command is terminated and subsequent commands are ignored.

System Operator Response: Make sure the database or area is covered before reissuing the command.

Module: DSPURCM8, DSPURM60

DSP1027I LOCAL SG OF COVERING GSG NOT A TRACKING SG

Explanation: A GENJCL.RECEIVE command was issued for a database or area that is not a shadow database or area; in other words, the command was issued at the active site. GENJCL.RECEIVE is only allowed from the tracking site.

System Action: The command fails.

Programmer Response: Issue the command at the tracking site or use another command at the active site.

Problem Determination: 2, 3, 8, and a listing of the RECON data sets.

Module: DSPJCCEV

DSP1028I RECORD OF TRACKED SUBSYSTEM MAY NOT BE CHANGED

Explanation: The CHANGE.SUBSYS command was issued specifying a tracking subsystem name. These records cannot be altered by commands.

System Action: The command fails.

Programmer Response: Issue the command using the correct subsystem name. If you need to change tracked subsystem record, other records or procedures need to be tried in order to effect the change desired.

Problem Determination: 2, 3, 8, and a listing of the RECON data sets.

Module: DSPURM20

DSP1029I ABNORMAL OR NORMAL MUST BE SPECIFIED

Explanation: A CHANGE.SUBSYS command was issued specifying a tracking subsystem name. The only parameters allowed in this case are ABNORMAL or NORMAL.

System Action: The command fails.

Programmer Response: Reissue the command.

Problem Determination: 2, 3, 8, and a listing of the RECON data sets.

Module: DSPURM20

DSP1030I CURRENT TOD IS EARLIER THAN PREVIOUS ACTSITE TOD, WAITING TILL *time*

Explanation: An active IMS being brought up for the first time after a remote takeover (planned or unplanned) has determined that the time at the new active site is earlier than the time at the old active site. Any activity now at the active site would cause problems (such as log records' being out of order). Therefore, the new active IMS will wait the amount of time (shown as *time*) needed to "catch up". *time* is specified as a normal timestamp. This situation can occur because the two sites are in different time zones or because the system clocks are not properly set or synchronized.

System Action: The subsystem waits for the time specified in the message, then continues processing.

Programmer Response: This is an information only message. No response is necessary.

Problem Determination: 2, 3, 8, and a listing of the RECON data sets.

Module: DSPFSIGN

DSP1031I STARTIME/TOTIME OR SSID WAS NOT GIVEN

Explanation: A command which requires a timestamp or SSID parameter was issued without it.

System Action: The command is not processed.

System Operator Response: Reissue the command with the appropriate parameters.

Module: DSPTSIGN, DSPURD65

DSP1032I LOG NOT A TRACKING SITE COPY

Explanation: A DELETE.LOG command was issued with the DSN parameter. This command is only valid on a copy of a tracking site log.

System Action: The command is not processed.

System Operator Response: Reissue the command against a copy of a tracking site log.

Module: DSPURD60

DSP1033I LOG CONTAINS MORE THAN ONE DSN, DSN=*data set name*

Explanation: A DELETE.LOG command was issued with the DSN parameter. One of the log records specified by STARTIME contained more than one data set entry in RECON with the specified data set name.

System Action: The command is not processed.

System Operator Response: Correct the data set name in one of the duplicate entries, then reissue the command.

Module: DSPURD60

DSP1034I LOG DOES NOT CONTAIN DATA SET

Explanation: A DELETE.LOG command was issued with the DSN parameter. There was no data set entry in RECON with the specified data set name, or the specified timestamp could not be found.

System Action: The command is not processed.

System Operator Response: Verify that the data set name exists in RECON, then reissue the command. You might want to use the LIST.RECON command to verify the entry and check it against the parameters used in the original failing command.

Module: DSPURD60

DSP1035I RSR IS NOT ACTIVE

Explanation: An attempt was made to execute either an INIT.GSG or an INIT.SG command in an environment where RSR is not installed. No GSG record is created.

System Action: The command is terminated and subsequent commands are ignored.

Module: DSPNORSR

DSP1036I RESET GSG COMMAND FAILED - USE BACKUP RECON DATA SET

Explanation: An attempt was made to use a RECON data set which has previously been used for a failed RESET.GSG command. You can only use this RECON to attempt to rerun the RESET.GSG command; any other use is not permitted because the RECON is not stable.

System Action: An error message is issued and processing continues.

System Operator Response: Replace the current RECON with the backup copy made by the RESET.GSG command.

Module: DSPURI00

DSP1037I RESET GSG COMMAND INVALID FOR A TRACKING SITE RECON

Explanation: During execution of the RESET.GSG command DBRC determined that the LOCAL service group in the GSG record identified by the GSGNAME value in the command currently operates in a tracking role.

System Action: DBRC terminates the command and ignores any subsequent commands.

System Operator Response: Issue the command against the RECON data set of an original active site after an *unplanned* RSR takeover has occurred. Review the command description before reissuing the command.

Module: DSPRESET

DSP1038I CONCURRENT IMAGE COPY NOT ALLOWED FOR SHADOW DATABASES

Explanation: A GENJCL.IC command was issued with the CIC keyword at a tracking site for a covered DBDS or DEDB area. Concurrent image copies are not allowed for covered databases and the command fails with return code 12.

System Action: Processing by the utility terminates.

System Operator Response: Either change the CIC keyword to NOCIC or remove it. The default for covered databases is NOCIC.

Module: DSPJCIMG

DSP1039I DEFAULT OF NOCIC USED

Explanation: A GENJCL.IC command was issued with neither the CIC or NOCIC keyword. A default of NOCIC was used because the DBDS or DEDB area was covered by a GSG, was a user-recoverable DEDB, or was nonrecoverable.

System Action: Processing continues.

System Operator Response: None. This is an informational message only.

Module: DSPJCIMG

DSP1040I SPECIFIED DSN FOUND MORE THAN ONCE WITH DIFFERENT LSN RANGES

Explanation: A DELETE.LOG command was issued with the DSN keyword. Entries for the data set were found in more than one of the RLDS and SLDS records specified by STARTIME, but with different log sequence number (LSN) ranges.

System Action: The command is terminated and subsequent commands are ignored.

Programmer Response: Delete the RLDS and SLDS records containing the entries for the specified data set, then recreate them with correct log sequence numbers using the NOTIFY command.

Module: DSPURD60

DSP1042I GENJCL.RECEIVE DID NOT PROCESS UNCOVERED AREA DBD= *dbdname* **AREA=** *areaname*

Explanation: A GENJCL.RECEIVE command was issued for a database or area not RSR-covered (not assigned to a global service group (GSG)).

System Action: The command is terminated.

Programmer Response: Use either the CHANGE.DB (DL/I) command or the CHANGE.DBDS (Fast Path) command to assign the database or area to the appropriate GSG.

Problem Determination: 2, 3, 8, and a listing of the RECON data sets.

Module: DSPJCCEV

DSP1042I GENJCL.RECEIVE DID NOT PROCESS UNCOVERED DBDS DBD= *dbdname* **DDN=** *areaname*

Explanation: A GENJCL.RECEIVE command was issued for a database or area not RSR-covered (not assigned to a global service group (GSG)).

System Action: The command is terminated.

Programmer Response: Use either the CHANGE.DB (DL/I) command or the CHANGE.DBDS (Fast Path) command to assign the database or area to the appropriate GSG.

Problem Determination: 2, 3, 8, and a listing of the RECON data sets.

Module: DSPJCCEV

DSP1043I LOGTOKEN *logtoken* **SPECIFIED FOR GSG** *gsgname* **IS INVALID**

Explanation: A NOTIFY.PRILOG OLDS command was issues with a LOGTOKEN parameter whose value failed to satisfy one of the following conditions:

- Greater than that contained in the previous PRILOG record for the same GSG, if any
- Less than that contained in the next PRILOG record for the same GSG, if any
- Not more than one greater than that contained in the specified GSG record

System Action: The command is terminated and subsequent commands are ignored.

Programmer Response: Reissue the command with a correct LOGTOKEN value.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

Module: DSPURT55

DSP1044I CHANGE TO COVERED STATE INVALID FOR TRACKING SITE RECON

Explanation: A change of state for a DB or DBDS, from not-covered to covered (member of an RSR global service group), is not permitted.

System Action: The command is rejected.

Programmer Response: Use the combination of DELETE.DB (or DELETE.DBDS) with INIT.DB (or INIT.DBDS) commands to change the covered state of the DB or DBDS. Or simply remove the GSGNAME() parameter from the command (CHANGE.DB or CHANGE.DBDS) and reenter the command.

Module: DSPURCM8, DSPURM60

DSP1047I DELETED DSN=*data_set_name*, FILESEQ=*nnnn*,VOLSER=*vvvvvv*(,...) or

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DSP1047I DELETED DSN=*data_set_name*,

DSP1047I FILESEQ=*nnnn*,VOLSER=*vvvvvv*(,...)

DSP1047I VOLSER=*vvvvvv*(,...)

Explanation: A log data set was deleted from the RECON data set because a DELETE.LOG command was issued or log compression occurred after a log record exceeded the threshold. The message variables are:

data_set_name
The name of the data set that was deleted

nnnn The file sequence number as recorded by DBRC in the RECON data set

vvvvvv The volume serial number

This message might be repeated, as necessary, to list all volume serial numbers. The message text might be spread across multiple lines, as shown above, if the data set name cannot fit on one line.

If the CATDS option is used or if the log is a tracking log (one that was created at an RSR tracking site as a shadow of an active system's log), the file sequence number and volume serial numbers are not listed. Duplicate data set names (the DSN of the SLDS) are listed if an RLDS was not created when an OLDS was archived.

System Action: Either the data set entry was removed from a log record in the RECON, or the entire log record was deleted from the RECON.

Programmer Response: None is required. This message is issued because LISTDL was specified on the DELETE.LOG command, or it is the default. If you do not want to see these messages, use the CHANGE.RECON command to specify NOLISTDL as the default, or specify NOLISTDL on the DELETE.LOG command.

Module: DSPDSN00

DSP1048I INVALID LOGRET TIME INTERVAL

Explanation: The time interval specified for the LOGRET keyword is invalid. Message DSP0106I explaining the invalid value might precede this message. The interval specified cannot be zero or greater than 365 days.

System Action: This command failed, and subsequent commands were not processed.

Programmer Response: Correct the invalid time interval. Reissue the command that failed, and any other commands that were not processed.

Problem Determination: 2, 3, and 8

Module: DSPURS00

DSP1049I INSUFFICIENT STORAGE AVAILABLE TO LIST DATA SETS

Explanation: This message is issued when log data set names being deleted from the RECON data set are to be listed, and sufficient storage is not available to list all the data sets deleted. Log data sets are deleted either by a DELETE.LOG command or by log compression during an archive job.

System Action: If this message resulted from a DELETE.LOG command, the command failed and subsequent commands are not executed.

If it occurred during an archive job, the job completes. If the job completes successfully, log compression occurred and one or more log data sets were deleted without being listed.

Programmer Response: Make more storage available to the job by increasing the REGION size specified on the JOB or EXEC statement, or execute the job with the NOLISTDL option. NOLISTDL can be specified on the DELETE.LOG command or made the default with the CHANGE.RECON command.

Module: DSPDSN00

DSP1050I DATABASE NOT DEFINED IN DBD LIBRARY DBD=*dbname*

Explanation: The member named *dbname* does not exist in the DBD library identified to DBRC.

System Action: The command fails and subsequent commands are not processed.

Programmer Response: Either correct the *dbname*, identify the correct DBD library, or add the member to

the DBD library. Then resubmit the command.

Module: DSPUDB00

Problem Determination: 2, 3

DSP1051I DBD MEMBER *dbname* IS NOT A HALDB

Explanation: The member *dbname* was read from the DBD library, but is not defined as a HALDB.

System Action: The command fails and subsequent commands are not processed.

Programmer Response: Either correct the *dbname* or define the DBD member as a HALDB. Then resubmit the command.

Module: DSPUDB00, DFSURMPT, DSPURSPT

Problem Determination: 2, 3

DSP1052I DATABASE *dbname* IS IN USE BY HALDB PARTITION DEFINITION UTILITY

Explanation: A HALDB cannot be changed by DBRC when it is under the control of the HALDB Partition Definition utility.

System Action: The command fails and subsequent commands are not processed.

Programmer Response: Either make changes using DBRC or the Partition Definition utility, but not both.

Module: DSPURCM8, DSPURDPT, DSPURD10, DSPURMPT, DSPURSPT

Problem Determination: 2, 3

DSP1053I KEYSTRNG LENGTH MUST BE AN EVEN NUMBER WHEN A HEX VALUE

Explanation: The KEYSTRNG value was entered in hexadecimal (in the form X'0FACDE'), but there was not an even number of hexadecimal characters.

System Action: The command fails and subsequent commands are not processed.

Programmer Response: Supply a correct hexadecimal value and resubmit the command.

Module: DSPURMPT, DSPURSPT

Problem Determination: 2, 3

DSP1054I *dbname partname* ALREADY DEFINED TO DBRC

Explanation: The partition on the `INIT.PART` command already exists. In the message text:

dbname
The database that contains the partition.

partname
The partition already defined to DBRC.

System Action: The command fails and subsequent commands are not processed.

Programmer Response: Correct the partition name and resubmit the command.

Module: DSPURSPT

Problem Determination: 2, 3

DSP1055I PARTITION NAME *partname* IS GREATER THAN 7 CHARACTERS

Explanation: The partition name supplied on an `INIT.PART` command (*partname*) cannot be greater than seven characters long.

System Action: The command fails and subsequent commands are not processed.

Programmer Response: Supply a partition name no greater than seven characters long and resubmit the command.

Module: DSPURDPT, DSPURSPT

Problem Determination: 2, 3

DSP1056I DSNPREFX IS LONGER THAN 37 CHARACTERS

Explanation: The DSNPREFX name supplied on an `INIT.PART` command is greater than 37 characters. DBRC constructs a data set name (limited to 44 characters) by appending a seven character suffix (beginning with a period ".") to DSNPREFX, so it is limited to a maximum of 37 characters.

System Action: The command fails and subsequent commands are not processed.

Programmer Response: Supply a DSNPREFX no greater than 37 characters and resubmit the command.

Module: DSPURMPT, DSPURSPT

Problem Determination: 2, 3

DSP1057I KEYSTRNG PARAMETER (HIGH KEY VALUE) IS REQUIRED

Explanation: The KEYSTRNG parameter was not specified on an `INIT.PART` command for a HALDB that does not have a partition selection exit defined. When there is no partition selection exit, each partition must be defined with a high key value which is specified by the KEYSTRNG parameter.

System Action: The command fails and subsequent commands are not processed.

Programmer Response: Either supply a KEYSTRNG value or define the HALDB with a partition selection exit, and resubmit the command.

Module: DSPURSPT

Problem Determination: 2, 3

DSP1058I KEYSTRNG PARAMETER (HIGH KEY VALUE) IS TOO LONG, MAX= *nnn*

Explanation: The KEYSTRNG parameter exceeded the maximum length allowed for the HALDB. The maximum length allowed is the length of the root segment key and is given as *nnn*.

System Action: The command fails and subsequent commands are not processed.

Programmer Response: Correct the KEYSTRNG value and resubmit the command.

Module: DSPURMPT, DSPURSPT

Problem Determination: 2, 3

DSP1060I *parameter* **NOT ALLOWED FOR NON PHDAM DATABASE**

Explanation: On an `INIT.PART` command for a HALDB which is not a PHDAM database, a parameter (*parameter*) was specified which is allowed only for PHDAM databases. The parameter can be RANDOMZR, ANCHOR, HIBLOCK, or BYTES.

System Action: The command fails and subsequent commands are not processed.

Programmer Response: Remove the parameter and resubmit the command.

Module: DSPURMPT, DSPURSPT

Problem Determination: 2, 3

DSP1061I FBFF VALUE CANNOT BE 1

Explanation: FBFF (Free Block Frequency Factor) can be a number between 0 and 100, excluding the number 1.

System Action: The command fails and subsequent commands are not processed.

Programmer Response: Change the FBFF value and resubmit the command.

Module: DSPURMPT, DSPURSPT

Problem Determination: 2, 3

DSP1062I MORE BLOCKSZE VALUES SPECIFIED THAN DATASET GROUPS (*nn*)

Explanation: More BLOCKSZE values were specified than there are data set groups (given by *nn*).

System Action: The command fails and subsequent commands are not processed.

Programmer Response: Supply at most *nn* BLOCKSZE values and resubmit the command.

Module: DSPURMPT, DSPURSPT

Problem Determination: 2, 3

DSP1063I BLOCKSZE VALUE *number* **MUST BE AN EVEN NUMBER**

Explanation: The BLOCKSZE value can be an even number no greater than 32,766. At least one value supplied was not an even number.

System Action: The command fails and subsequent commands are not processed.

Programmer Response: Correct the BLOCKSZE value (and verify all values) and resubmit the command.

Module: DSPURMPT, DSPURSPT

Problem Determination: 2, 3

DSP1064I KEYSTRNG (HIGH KEY VALUE) MUST BE UNIQUE, DBD= *dbname* **PART=** *partname*

Explanation: The high key value specified by the KEYSTRNG parameter on an `INIT.PART` command is the same as the high key value for an existing partition. High key values must be unique for each partition.

In the message text:

dbname
The database that contains the partition.

partname
The existing partition with the same high key value.

System Action: The command fails and subsequent commands are not processed.

Programmer Response: Supply a unique high key value and resubmit the command.

Module: DSPURMPT, DSPURSPT

Problem Determination: 2, 3

DSP1065I INIT COMMAND FAILED, RC= *rc* **RSN=***rsn*

Explanation: An `INIT.PART` command failed with return code *rc* and reason code *rsn*. Usually this is the result of encountering errors on the RECON data set.

System Action: The command fails and subsequent commands are not processed.

Programmer Response: Corrective action depends on if messages indicate a problem with the RECON. If there is a correctable problem with the RECON, resubmit the command after the RECON has been repaired. Otherwise, contact the IBM Support Center for assistance.

Module: DSPURSPT

Problem Determination: 2, 3

DSP1066I KEYSTRNG CONTAINS AN INVALID HEX VALUE

Explanation: The KEYSTRNG value was entered in hexadecimal (in the form X'0FACDE'), but contains an invalid hexadecimal character. Valid hexadecimal characters are: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, A, B, C, D, E, and F.

System Action: The command fails and subsequent commands are not processed.

Programmer Response: Correct the hexadecimal value and resubmit the command.

Module: DSPURMPT, DSPURSPT

Problem Determination: 2, 3

DSP1067I PARTITION NAME *partname* IS NOT UNIQUE

Explanation: The name specified on the PART parameter for the INIT.PART command, identified by *partname*, already exists for either a HALDB master, another partition, or a nonpartitioned database.

System Action: The command fails and subsequent commands are not processed.

Programmer Response: Select a different partition name and resubmit the command.

Module: DSPURSPT

Problem Determination: 2, 3

DSP1068I KEYSTRNG PARAMETER LONGER THAN 256 or 512 HEX

Explanation: The maximum length of the KEYSTRNG parameter is 256 characters. When specified as a hexadecimal value, the maximum length is 512 since the two hexadecimal characters result in one hexadecimal value. For example, the string X'AB' contains two characters within the quotes but results in one byte. Although the absolute maximum is 256, if KEYSTRNG is defining a high key value (as opposed to a partition selection string), then the maximum length is limited to the length defined for the root segment key.

System Action: The command fails and subsequent commands are not processed.

Programmer Response: Supply a value no greater than 256 bytes (or no longer than the root segment key length with a high key value).

Module: DSPURMPT, DSPURSPT

Problem Determination: 2, 3

DSP1069I ALREADY AT MAX NUMBER OF PARTITIONS

Explanation: An INIT.PART command failed because the maximum number of partitions (1,001) have already been defined for the HALDB.

System Action: The command fails and subsequent commands are not processed.

Programmer Response: This situation cannot be corrected by fixing a parameter and resubmitting the command. Have your DBA contact the IBM Support Center for assistance.

Module: DSPURSPT

Problem Determination: 2, 3

DSP1070I CANNOT INSERT PARTITION, NEXT ONE IS AUTHORIZED

Explanation: An attempt to insert a partition failed because the next partition is in use (authorized). The high key value (defined by the KEYSTRNG parameter) specified on an INIT.PART command is less than the high key value of an existing partition. As a result, the new partition is being inserted (as opposed to being added to the end). A partition cannot be inserted while the next one is in use.

System Action: The command fails and subsequent commands are not processed.

Programmer Response: Stop the next partition using the /DBR command and resubmit the command.

Module: DSPURSPT

Problem Determination: 2, 3

DSP1071I DATABASE *dbname* IS NOT A HALDB

Explanation: An INIT.PART command failed because the database identified by *dbname* has not been defined to DBRC as TYPHALDB.

System Action: The command fails and subsequent commands are not processed.

Programmer Response: Either correct the *dbname* or delete the database (using the DELETE.DB command) and redefine it as a TYPHALDB (using the INIT.DB command).

Important: Deleting a database removes all its associated DBDS records and all recovery related records. Before deleting a database, be sure it is the correct thing to do.

Module: DSPURCM8, DSPURDPT, DSPURD10, DSPURMPT, DSPURSPT

Problem Determination: 2, 3

DSP1072 PARTSEL ENTERED WITHOUT TYPHALDB

Explanation: An INIT.DB command was entered with the PARTSEL parameter, but without the TYPHALDB parameter. PARTSEL is valid only for a HALDB.

System Action: The command fails and subsequent commands are not processed.

Programmer Response: Either remove the PARTSEL parameter, or ad the TYPHALDB parameter and resubmit the command.

Module: DSPURS10

Problem Determination: 2, 3

DSP1073I BLOCKSZE IS ALLOWED ONLY FOR OSAM DATABASE

Explanation: BLOCKSZE was specified for a HALDB partition which is not an OSAM database.

System Action: The command fails and subsequent commands are not processed.

Programmer Response: Remove the BLOCKSZE parameter and resubmit the command.

Module: DSPURMPT, DSPURSPT

Problem Determination: 2, 3

DSP1076I INVALID MINVERS RELEASE LEVEL

Explanation: The MINVERS parameter was specified but it is an invalid value. The valid levels are:

- 61 for IMS Version 6
- 71 for IMS Version 7
- 81 for IMS Version 8

System Action: The command fails and subsequent commands are not processed.

Programmer Response: Correct the MINVERS parameter and resubmit the command.

Module: DSPURM90, DSPURS00

Problem Determination: 2, 3

DSP1077I THE ACTIVE DBDS IS BEING IMAGE COPIED

Explanation: An image copy of the inactive DBDS was requested. Only active DBDSs may be image copied. The active DBDS will be image copied.

System Action: Processing continues. This is an informational message.

Programmer Response: Contact the IBM Support Center if you require additional assistance.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP1078I INACTIVE M-V DBDS RECORDS FOR DBD=*XXXXXXXX* DELETED FROM RECON

Explanation: A command was issued to change information in the RECON data set. As a result of the command processing, the inactive M-V DBDSs were deleted. If Y DBDSs existed, they were also deleted.

System Action: Processing continues. This is an informational message.

Programmer Response: Contact the IBM Support Center if you require additional assistance.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP1079I RECON INCONSISTENCY, DBDS RECORD CANNOT BE FOUND FOR DBD=*XXXXXXXX* DBN=*XXXXXXXX*

Explanation: An inconsistency was detected in the RECON data set. A DBDS record for the indicated DBD and DBN was not found.

System Action: Processing is terminated. The RECON data sets are not updated.

Programmer Response: Contact the IBM Support Center if you require additional assistance.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP1080I Online Reorg with runtime timestamp has been reset to active status

Explanation: An unknown command was used to change the status of a HALDB OLR record.

System Action: Informational message.

Programmer Response: Contact the IBM Support Center if you require additional assistance.

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP1084A COMMAND NOT ALLOWED FOR A DBDS OF A DL/I PARTITIONED DATABASE

Explanation: The command being processed is for a DBDS that is associated with a DL/I partitioned database. The DBDS cannot be processed with this command.

System Action: The command fails. Subsequent commands are not processed.

Programmer Response: You cannot delete or initialize individual DBDSs for partitions. You must either delete the partition with a DELETE.PART command, or create a partition with the INIT.PART command.

Module: DSPURD00, DSPURS00

Problem Determination: 2, 3

DSP1085A THE DATA SET GROUP COUNT DOES NOT MATCH THE DATA SET GROUP COUNT IN THE DBDLIB

Explanation: During CHANGE.PART processing, the data set group count in the RECON does not match the data set group count in the DBDLIB. This might occur if either the wrong DBDLIB is being used or a new DBDGEN has been performed.

System Action: The command fails.

Programmer Response: A DELETE.PART command might need to be entered if a DBDLIB has changed.

Module: DSPURMPT

Problem Determination: 2, 3

DSP1086A THE DATABASE ORGANIZATION DOES NOT MATCH THE DATABASE ORGANIZATION IN THE DBDLIB

Explanation: During CHANGE.PART processing, the database organization in the RECON does not match the database organization in the DBDLIB. Either the DBD definition has been changed since registering the HALDB in the RECON, or you might be using an incorrect DBDLIB.

System Action: The command fails.

Programmer Response: If the DBD definition has been changed, delete and redefine the HALDB to DBRC.

Module: DSPURMPT

Problem Determination: 2, 3

DSP1087A INCONSISTENT PARAMETERS SPECIFIED FOR *dbname partname*

Explanation: The parameters specified for the partition are inconsistent with the current information recorded in the RECON. For the CHANGE.PART command, one of the following might be true:

- ENABLE or DISABLE was specified and another parameter was also specified, which is not allowed
- The partition is marked as disabled and an attempt to change another parameter besides ENABLE was specified, which is not allowed

System Action: The command fails.

Programmer Response: Correct the conflict and resubmit the command.

Module: DSPURMPT

Problem Determination: 2, 3

DSP1088A THE MASTER DATABASE *dbname* **NOW USES A PARTITION SELECTION ROUTINE**

Explanation: Partition strings were removed from all partitions after you added a partition selection routine name.

System Action: The partition high keys were cleared.

Programmer Response: Define the partition string values.

Module: DSPURCM8

Problem Determination: 2, 3

DSP1089A SET HIGH KEY VALUES FOR EACH PARTITION BEFORE USING

Explanation: The name of the selection routine was cleared. You must set the high keys value for each partition before it can be used.

System Action: The partition selection strings were cleared.

Programmer Response: Set the high key values again.

Module: DSPURCM8

Problem Determination: 2, 3

DSP1090I VALUES SPECIFIED IN CHANGE COMMAND ARE NOT DIFFERENT FROM VALUES ALREADY DEFINED

Explanation: No changes were detected from what is already defined.

System Action: The command fails.

Programmer Response: None

Module: DSPURCM8

Problem Determination: 2, 3

DSP1091A DATA BASE DATA SET NOT DEFINED IN RECON FOR *dbname ddname*

Explanation: Attempting to change a partition and the database data set could not be found. At least one database data set must exist. This is usually a I/O error when accessing the RECON.

System Action: The command fails.

Programmer Response: Call the IBM Support Center.

Module: DSPURMPT

Problem Determination: 2, 3

DSP1092A CANNOT CHANGE PARTITION, NEXT ONE IS AUTHORIZED

Explanation: The change to this partition affects the next partition which is authorized.

System Action: The command fails.

Programmer Response: Wait until the next partition is not authorized and resubmit the command.

Module: DSPURMPT

Problem Determination: 2, 3

DSP1093A CANNOT DELETE PARTITION, NEXT ONE IS AUTHORIZED

Explanation: The deletion of this partition affects the next partition which is authorized.

System Action: The command fails

Programmer Response: Wait until the next partition is not authorized and resubmit the command.

Module: DSPURDPT

Problem Determination: 2, 3

DSP1094A CHANGE COMMAND FAILED, RC= *rc* **RSN=** *rsn*

Explanation: The `CHANGE.PART` command failed with return code*rc* and reason code *rsn*. This is usually the result of encountering errors in the RECON data set.

System Action: The command fails and subsequent commands are not processed.

Programmer Response: Corrective action depends on whether the messages indicate that there is a problem with the RECON. If there is a correctable problem with the RECON, resubmit the command after the RECON has been repaired. Otherwise, contact the IBM Support Center for assistance.

Module: DSPURMPT

Problem Determination: 2, 3

DSP1095A DATABASE *dbname* **IS AUTHORIZED**

Explanation: During DELETE processing for a partition, the database is authorized.

System Action: The command fails.

Programmer Response: When the database is no longer authorized, resubmit the command.

Module: DSPURDPT, DSPURD10

Problem Determination: 2, 3

DSP1096A DELETE COMMAND FAILED, RC= *rc* **RSN=** *rsn*

Explanation: The `DELETE.PART` command failed with return code *rc* and reason code *rsn*. This is usually the result of encountering errors in the RECON data set.

System Action: The command fails and subsequent commands are not processed.

Programmer Response: Corrective action depends on whether the messages indicate that there is a problem with the RECON. If there is a correctable problem with the RECON, resubmit the command after the RECON has been repaired. Otherwise, contact the IBM Support Center for assistance.

Module: DSPURMPT

Problem Determination: 2, 3

DSP1097A PARTID *value1* **IS GREATER THAN THE NEXT PARTID** *value2* **TO BE USED FOR** *dbname*

Explanation: The partition ID *value1* supplied is greater than the next one to be used (*value2*) for this master database. The partition ID value must be less than or equal to current partition ID assigned to the master database as listed in the RECON.

System Action: The command fails and subsequent commands are not processed.

Programmer Response: Correct the partition ID value and resubmit the command.

Module: DSPURSPT

Problem Determination: 2, 3

DSP1098A PARTITION *dbname partname* **IS NOT DEFINED TO DBRC**

Explanation: The partition was not found in the RECON during `CHANGE.PART` or `DELETE.PART` command processing.

System Action: The command fails and subsequent commands are not processed.

Programmer Response: Verify the correct partition name was supplied. Correct the partition name and resubmit the command if an error was found. Otherwise, contact the IBM Support Center for assistance.

Module: DSPURMPT, DSPURDPT

Problem Determination: 2, 3

DSP1099A PARTID*value* **IS ALREADY IN USE FOR** *partname*

Explanation: During `INIT.PART` or `CHANGE.PART ENABLE` command processing, the partition ID value is already in use by an existing partition that is enabled.

System Action: The command fails and subsequent commands are not processed.

Programmer Response: If INIT.PART command processing, select a unique partition ID. If CHANGE.PART ENABLE, either the partition being changed or the partname issued in this message will need to be deleted because duplicate partition IDs are not allowed.

Module: DSPURMPT, DSPURSPT

Problem Determination: 2, 3

DSP1100I DBRC IS BUILDING THE DMB TABLE RECORD

Explanation: The last DMB number DBRC assigned was 32 767. DBRC is processing an INIT.DB command and will create or refresh the DMB record in the RECON data set. DBRC will retrieve all database records in the RECON data set to determine which DMB numbers are currently in use.

System Action: None.

Programmer Response: None. The command will take longer to process because DBRC must locate all the existing database records in the RECON data set.

Module: DSPURS10

DSP1101I THE DMB LIMIT HAS BEEN EXCEEDED

Explanation: An attempt to register a new database with DBRC fails due to the limit of 32 767 already having been reached.

System Action: The command fails.

System Programmer Response: Use a release of IMS that supports registering databases after the DMB number has reached 32 767. If such a release is not available, call the IBM Support Center.

Module: DSPURS10

DSP1102I THE DMB LIMIT HAS BEEN REACHED

Explanation: The RECON has 32 767 databases registered. That is the maximum allowed. The process to register another database in the RECON data set fails. The current DMB table record was searched and all DMB numbers are currently assigned to registered databases.

System Action: The attempt to register another database with DBRC fails.

Programmer Response: If this message is received in error, please contact the IBM Support Center. If the message is correctly issued and old databases no longer in use are still registered in the RECON data set, delete them from the RECON data set.

Module: DSPURS10

DSP1103I OBTAINING THE NEXT DMB NUMBER FROM RECON DMB TABLE FAILED

Explanation: DBRC encountered an error trying to obtain the next DMB number to assign when registering a database.

System Action: The command fails.

Programmer Response: If a prior message was not also issued explaining the error, please contact the IBM Support Center.

Module: DSPURS10

DSP1123I *jjjjjjjj* DBRC REGISTERED WITH IMSPLEX *ppppp* {USING EXIT}

Explanation: DBRC successfully registered with SCI for the named IMSplex. Automatic RECON loss notification can be received by this DBRC. If the message includes USING EXIT, DBRC used the SCI registration exit to determine the IMSplex name.

jjjjjjjj The job name.

System Action: DBRC initialization continues.

Programmer Response: None

Module: DSPRLI00

DSP1124I DBRC NOT PARTICIPATING IN IMSPLEX *ppppp*

Explanation: DBRC is not connected to an IMSplex but an IMSplex, identified by *ppppp*, is recorded in the RECON data sets. This situation implies that an IMSplex has been recorded in the RECON data sets since DBRC initialized.

System Action: DBRC continues operation but cannot receive automatic RECON loss notification from the IMSplex.

Programmer Response: If you intended to access an IMSplex, no response is necessary.

If the IMSplex was mistakenly recorded in the RECON data sets and an SCI was available for the IMSplex indicated by *ppppp*, submit a CHANGE.RECON NOPLEX command to revert to a non-IMSplex environment.

Module: DSPURI30

DSP1125A IMSPLEX NAME CONFLICT - *xxxxx* FROM DSPSCIX0, *yyyyy* FROM IMS

Explanation: In an online environment, the IMSplex name in the IMS Common Service Layer PROCLIB member (*yyyyy*) conflicts with the IMSplex name being used by DBRC (*xxxxx*). DBRC obtains the IMSplex name from the SCI registration exit, DSPSCIX0, or from the IMSPLEX parameter on the job step EXEC statement.

In the message text:

yyyyy The name of the IMSplex in the IMS Common Service Layer PROCLIB member that conflicts with the name returned by DSPSCIX0, the SCI registration exit.

xxxxx The name of the IMSplex returned by DSPSCIX0 that conflicts with the name of the IMSplex in the IMS Common Service Layer PROCLIB member.

System Action: This message is followed by message DSP0300I and abend 2480.

System Operator Response: Either change the IMSplex name in the IMS PROCLIB member or the IMSplex name that DBRC is trying to use.

Module: DSPRLI00

DSP1134A EXIT MODULE *exitname* NOT FOUND

Explanation: The exit identified by *exitname* could not be located.

System Action: The DBRC command failed. RECON is not updated. Subsequent commands are not processed.

System Operator Response: A DBRC Command Authorization Exit must be linked in if your level of DBRC command authorization is set to EXIT or BOTH. If you do not want to use an exit, change your level of command authorization to SAF or NONE using the `CHANGE.RECON` command.

Module: DSPDCAI0

DSP1135A SCI REGISTRATION FAILED, IMSPLEX NAME=*nnnnn*, RC=*xxxxxxxx*, RSN=*yyyyyyyy*, JOB=*jjjjjjjj*

Explanation: DBRC attempted to register with SCI using IMSplex name *nnnnn* and failed. In the message text:

nnnnn The name of the IMSplex that failed SCI registration.

xxxxxxxx
The SCI CSLSCREG return code.

yyyyyyyy
The SCI CSLSCREG reason code.

jjjjjjjj The job name.

Related Reading: For information on CSLSCREG return and reason codes, see *IMS Version 9: Common Service Layer Guide and Reference*. For more information about how DBRC obtains the IMSplex name, see *IMS Version 9: Database Recovery Control (DBRC) Guide and Reference*.

System Action: RECON access fails.

System Operator Response: For the appropriate action, see the SCI CSLSCREG return and reason codes in *IMS Version 9: Common Service Layer Guide and Reference*.

Module: DSPRLI00

DSP1136A RECON ACCESS DENIED, IMSPLEX NAME *nnnnn* NOT VALID, JOB=*jjjjjjjj*

Explanation: The IMSplex used by DBRC is not the one associated with these RECON data sets. *nnnnn* identifies the name of the IMSplex that failed RECON access. If *nnnnn* is *****, it indicates that DBRC is not participating in an IMSplex although the RECONs show that an IMSplex is required.

System Action: RECON access fails.

System Operator Response: Use the correct IMSplex name. In emergency situations, RECON access can be forced by an SCI registration exit, DSPSCIX0. For more information about the use of DSPSCIX0, see *IMS Version 9: Database Recovery Control (DBRC) Guide and Reference*.

Module: DSPRLI00

DSP1137I IMSPLEX MAY NOT BE CHANGED, DBRC ACTIVE FOR

job1
{*job2*
{*job3*
{MORE}}}

Explanation: An attempt was made to change an IMSplex with `CHANGE.RECON IMSPLEX()/NOPLEX` while the RECONs are in use. In the message text, *job1*, *job2*, and *job3* indicate which DBRC jobs are active in the RECON. If the job list is longer than three names, MORE is displayed.

System Action: The command fails.

System Operator Response: Wait until no other jobs are using these RECONs.

Module: DSPURI30, DSPURM90

DSP1139A RECON ACCESS DENIED BY DSPSCIX0, JOB=*jjjjjjjj*

Explanation: The SCI registration exit, DSPSCIX0, issued return code 12. For more information on writing an exit and the effect of the reason code, see *IMS Version 9: Database Recovery Control (DBRC) Guide and Reference*.

System Action: RECON access fails.

System Operator Response: Not applicable.

Module: DSPRLI00

DSP1140A UNEXPECTED RETURN CODE FROM *aaaaaaaa* REQUEST RC=*nnnnnnnn*, RSN=*rrrrrrrr*, JOB=*jjjjjjjj*

Explanation: A DBRC request for the SCI service (*aaaaaaaa*) failed. In the message text:

aaaaaaaa
The failed SCI service, which can be one of the following services:

CSLSCBFR
Returns the SCI buffer to SCI.

CSLSCQRY
Queries the SCI registration list.

CSLSCRDY
Enables receipt of SCI messages by type.

CSLSCMSG
Sends messages to other SCI registrants.

CSLSCDRG
Deregisters from SCI.

nnnnnnnn
The SCI return code. For information on SCI return codes, see *IMS Version 9: Common Service Layer Guide and Reference*.

rrrrrrrr The SCI reason code. For information on SCI reason codes, see *IMS Version 9: Common Service Layer Guide and Reference*.

jjjjjjjj The job name.

System Action: For CSLSCBFR and CSLSCQRY requests, DBRC continues processing. All other request failures result in abnormal termination.

System Operator Response: For the appropriate action, see the SCI return and reason codes in the *IMS Version 9: Common Service Layer Guide and Reference*.

Module: DSPRLI00, DSPRLN00, DSPRLTR0, DSPRLX10

DSP1141I RECON LOSS NOTIFICATION RECEIVED, JOB=*jjjjjjjj*

Explanation: DBRC received notification of RECON loss. For more information on RECON loss, see *IMS Version 9: Database Recovery Control (DBRC) Guide and Reference*.

System Action: DBRC closes and then reopens the RECONs. DBRC discards any RECONs it finds that are in error.

System Operator Response: Not applicable.

Module: DSPRLXB0

DSP1142A EXIT MODULE *exitname* FOUND IN UNAUTHORIZED LIBRARY: *dsn*

Explanation: The exit identified by *exitname* was found in the data set identified by *dsn*, which is neither an authorized library nor a member of LINKLST. Exitname may be one of:

DSPSCIX0
The SCI Registration Exit

DSPDCAX0
The DBRC Command Authorization Exit

System Action: For DSPSCIX0, RECON access fails. For DSPDCAX0, the DBRC command failed. RECON is not updated. Subsequent commands are not processed.

System Operator Response: Specify an authorized library.

Module: DSPDCAI0, DSPRLI00

DSP1143I RECON ACCESS FORCED BY DSPSCIX0, JOB=*jjjjjjjj*

Explanation: The SCI registration exit, DSPSCIX0, returned a return code of 8. For information on how to write an exit and the effects of return codes, see *IMS Version 9: Database Recovery Control (DBRC) Guide and Reference*.

System Action: RECON access proceeds without SCI registration regardless of possible RECON use by an IMSplex.

System Operator Response: Not applicable.

Module: DSPRLI00

DSP1144I IMSPLEX PARAMETER NOT ALLOWED

Explanation: Either the RECON has no IMSplex value (CHANGE.RECON can only change the value, not set it), or an attempt was made to issue the request from an online IMS by use of the `/RMCHANGE` command, neither of which is allowed.

System Action: The command terminates with return code 12.

Programmer Response: To set an initial IMSplex value, stop all DBRC activity and then start new DBRC activity using either the SCI registration exit, DSPSCIX0, or the IMSplex parameter to set the IMSplex value.

To change the IMSplex value, stop all DBRC activity and submit the command using the DBRC utility, DSPURX00. In either case, only DBRC activity involving the subject RECONs must be stopped.

Module: DSPURM90

DSP1145I RECON LOSS NOTIFICATION NOT SENT, JOB=*jjjjjjjj*

Explanation: RECON loss notification cannot be sent because SCI is not available.

System Action: DBRC continues processing.

Programmer Response: SCI must be restarted for RECON loss notification to function.

Module: DSPRLN00

DSP1146A EEQE LIMIT OF 32767 FOR DB DBD=*xxxxxxxx*

Explanation: The request to add an EEQE would cause the limit to be reached for the *xxxxxxxx* database.

System Action: The `CHANGE.DBDS` command fails.

System Operator Response: Error messages were issued when each EEQE was written. Since the database was not stopped, the DBRC limit for EEQEs was reached. You need to recover the *xxxxxxxx* database.

If this appears to be a logic error within DBRC, contact the IBM Support Center.

Problem Determination: 2, 3, 35, and listing of RECON

Module: DSPRLI00

DSP1147I DBRC REGION WAITING FOR SCI, IMSPLEX NAME=*ppppp*

Explanation: DBRC Automatic RECON Loss Notification is active but SCI is not available for IMSPLEX *ppppp*.

System Action: IMS waits until the user starts an SCI region for IMSPLEX *ppppp* before continuing with DBRC initialization.

Programmer Response: Start the SCI region for which IMS is waiting.

Module: DSPRLI00

DSP1150I LOG RECORD(S) COULD NOT BE COMPRESSED,

RECORD TIME = *timestamp1*

compression time **=** *timestamp2*

Explanation: DBRC determined that the PRILOG, identified by *timestamp1*, could not be compressed while it was running one of the following commands or processes:

- DELETE.LOG INACTIVE
- NOTIFY.PRILOG RLDS
- IMS Log Archive utility
- Recording an RSR tracking log

In the message text:

timestamp1
The time stamp for the associated PRILOG.

compression time
Compression time identifies one of the following timestamps limiting the compression of the log:

- EARLIEST ALLOC TIME
- LOG RETENTION TIME
- EARLIEST CHECK POINT

timestamp2
The time stamp for the associated *compression time*. For LOG RETENTION TIME it is the current time minus the Log Retention Period.

System Action: Processing continues.

User Response: None

Module: DSPURD60

DSP1154A DBRC COMMAND AUTHORIZATION DENIED BY DSPDCAX0 FOR USER *userid* RESOURCE NAME=*nnnnnnnnnnnn* RC=*rc*

Explanation: The DBRC Command Authorization exit, DSPDCAX0, denied the user ID *userid* authorization to submit the DBRC command, *nnnnnnnnnnnn*. In the message text:

userid The user ID that was denied authorization to submit the DBRC command.

nnnnnnnnnnnn
The resource name of the command that was denied.

rc The DSPDCAX0 exit return code. For return code information on this exit, see the *IMS Version 9: Customization Guide*.

System Action: The *nnnnnnnnnnnn* DBRC command fails. Subsequent commands are not processed. If you're running the HALDB Partition Definition Utility, the RECON request fails.

System Operator Response: Not applicable.

Module: DSPRLI00

DSP1157A USER *userid* NOT AUTHORIZED FOR COMMAND RESOURCE NAME=*resource name* REQUEST=*reqtype* SAF RC=*safrc* RACF RC=*racfrc* RACF REASON=*racfrsn*

Explanation: DBRC issued a `RACROUTE REQUEST=AUTH` command to determine if the user is authorized to issue the command *resource name*. The return and reason

codes from RACF or an equivalent security product indicate that the user is not authorized.

In the message text:

userid The user not authorized to perform the command.

resource name
The command the user is not authorized to issue.

reqtype The type of RACROUTE request.

racfrc A RACF return code that indicates the user is not authorized.

racfrsn A RACF reason code that indicates the user is not authorized.

For more information on the SAF return code, the RACF return code, and the RACF reason code, see the *External Security Interface (RACROUTE) Macro Reference*.

System Action: The DBRC command failed. DBRC command processing ended with RC=12. The RECON data sets were not updated. Subsequent commands are not processed. If this is the HALDB Partition Definition Utility, the RECON request fails.

Programmer Response: Take one of the following actions as appropriate:

- Contact the person who is responsible for defining the security product's profiles or policies and gain authority from that person to issue the DBRC *resource name* command.
- Determine who already has authority to issue the command and have that person issue the command.

Module: DSPDCAI0

Problem Determination: 1, 2, 3, 8, 40

DSP1158I INVALID COMMAND AUTHORIZATION OPTION SPECIFIED

Explanation: The CMDAUTH keyword was specified with an invalid DBRC command authorization option. Valid options are:

- SAF
- EXIT
- BOTH
- NONE

System Action: The command failed. Subsequent commands are not processed.

Programmer Response: Specify the correct CMDAUTH option, then reissue the command and any other commands that were not processed.

Module: DSPURX00

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP1159I HIGH LEVEL QUALIFIER REQUIRED WITH THE SPECIFIED CMDAUTH OPTION

Explanation: The CMDAUTH keyword was specified with DBRC command authorization option SAF, EXIT, or BOTH. A high level qualifier must be specified with these options. For information on high level qualifiers, see the *IMS Version 9: Database Recovery Control (DBRC) Guide and Reference*.

System Action: The command failed. Subsequent commands are not processed.

Programmer Response: Correct your CMDAUTH keyword values, then reissue the command and any other commands that were not processed.

Module: DSPDCAI0

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP1160I HIGH LEVEL QUALIFIER NOT ALLOWED WITH CMDAUTH OPTION NONE

Explanation: CMDAUTH option NONE was specified with a high level qualifier. The high level qualifier is only valid with option SAF, EXIT, or BOTH.

System Action: The command failed. Subsequent commands are not processed.

Programmer Response: Correct your CMDAUTH keyword values, then reissue the command and any other commands that were not processed.

Module: DSPURX00

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP1161I COMMAND AUTHORIZATION LEVEL CANNOT BE CHANGED WITH ONLINE COMMAND

Explanation: The CMDAUTH keyword was specified in the online `CHANGE.RECON` command (`/RMCHANGE`). DBRC command authorization does not support online commands. Therefore, you cannot use an online command to change the command authorization level.

System Action: The command failed. Subsequent commands are not processed.

Programmer Response: Change your command authorization level using the DBRC command processor in module DSPURX00.

Module: DSPURX00

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DSP1162A DBRC RESOURCE NAME TABLE DEFINITION ERROR FOR COMMAND VERB *cmdname* **MODIFIER** *modname*

Explanation: The internal DBRC Resource Name Table either contained no resources for the specified command or none of the resources defined for this command contained a matching qualifier.

For information on the command name (*cmdname*) and modifier name (*modname*), see the *IMS Version 9: Database Recovery Control (DBRC) Guide and Reference*.

System Action: The command failed. Subsequent commands are not processed.

Programmer Response: This is an internal DBRC problem. Contact the IBM Support Center for assistance.

Module: DSPDCAI0

Problem Determination: 2, 3, 8, and listings of the RECON data sets.

DBRC Request Return Codes

The following return codes are given in decimal and hexadecimal.

- Table 78 on page 393: Sign-On Normal Call
- Table 79 on page 393: Sign-On Alternate Call
- Table 80 on page 394: Sign-On Recovery Call
- Table 81 on page 394: Sign-Off Normal Call
- Table 82 on page 395: Sign-Off Abnormal Call
- Table 83 on page 395: Authorization Call
- Table 84 on page 395: Unauthorization Call
- Table 85 on page 396: DB I/O Error Exit
- Table 86 on page 396: DB Open Exit
- Table 87 on page 396: Local and Global /START Command
- Table 88 on page 397: Global /STOP Command
- Table 89 on page 397: Local and Global /DBD Command
- Table 90 on page 397: Global /DBR Command
- Table 91 on page 398: OLDS Open Call
- Table 92 on page 398: OLDS Switch
- Table 93 on page 398: OLDS Close Call
- Table 94 on page 398: OLDS Status Call
- Table 95 on page 399: Last OLDS Call
- Table 96 on page 399: Locate Log Record Call
- Table 97 on page 399: Archive Init Call
- Table 98 on page 400: Archive Completion Call
- Table 99 on page 400: Archive End-of-Job Call
- Table 100 on page 400: SLDS Recovery
- Table 101 on page 400: OLDS Log Recovery Utility Open Call
- Table 102 on page 400: SLDS Log Recovery Utility Open Call
- Table 103 on page 401: OLDS Log Recovery Utility Open Call
- Table 104 on page 401: SLDS Log Recovery Utility Open Call
- Table 105 on page 402: OLDS Log Recovery Utility Open Call
- Table 106 on page 402: SLDS Log Recovery Utility End-of-Job Call
- Table 107 on page 402: OLDS Log Recovery Utility End-of-Job Call
- Table 108 on page 402: RELOAD Utility
- Table 109 on page 403: Begin HSSP Image Copy Call
- Table 110 on page 403: End HSSP Image Copy Call

- Table 111 on page 403: LOGSET Call
- Table 112 on page 404: SAVUOR Call
- Table 113 on page 404: UPDUOR Call
- Table 114 on page 405: VERUOR Call
- Table 115 on page 405: New Update Set ID Validation
- Table 116 on page 406: End of Active Log Stream Notification
- Table 117 on page 406: Tracking Log OPEN, CLOSE, and DELETE
- Table 118 on page 406: End Tracking of Active Updates
- Table 119 on page 406: Early End-of-Database Tracking
- Table 120 on page 407: Online Forward Recovery (OFR) Exit
- Table 121 on page 407: End of Online Forward Recovery (OFR) Exit
- Table 122 on page 407: Get Service Group List
- Table 123 on page 407: Query Log Data Sets
- Table 124 on page 407: Query Global Service Group PRILOG Tokens
- Table 125 on page 408: Query Tracking Log Gap Descriptors
- Table 126 on page 408: RSR Takeover Request (planned or unplanned)
- Table 127 on page 408: Possible Error Conditions for Message DSP0266I

Return Codes from Sign-on Normal Call

Table 78. Sign-on Normal Call Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful completion.
8	08	Existing subsystem entry found in RECON data set.
12	0C	Existing subsystem entry found in RECON data set marked as abnormally terminated.
16	10	Existing subsystem entry found in RECON data set marked as having recovery processing started.
20	14	Subsystem name was not unique.
41	29	Request for subpool 0 storage (24K) failed.
44	2C	Internal DBRC error.
48	30	Invalid parameter found.
76	4C	The requested role does not match local role (active signing on at tracker).
80	50	No GSG record found in the RECON during Sign-on Recovery Start for an RSR capable system.
84	54	Another tracking subsystem (different ssid) already exists for the GSG (DSPTSIGN).
88	58	An RSR takeover is in progress. Normal sign-on is rejected.
92	5C	This subsystem is a member of another GSG or no GSG name was specified when restarting an RSR capable SS.

Return Codes from Sign-on Alternate Call

Table 79. Sign-on Alternate Call Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful completion.
8	08	Alternate subsystem already exists.

Table 79. Sign-on Alternate Call Return Codes (continued)

Decimal	Hexadecimal	Meaning
24	18	Alternate subsystem is signing on, but a subsystem record does not exist.
28	1C	A takeover request provided a block too small to return a list of authorized databases, or no block was provided.
60	3C	Takeover requested, but no alternate signed on.
64	40	The IRLM id in the alternate takeover request does not match the IRLM id in the subsystem record.
68	44	Alternate subsystem is signing on with recovery control.

Return Codes from Sign-on Recovery Call

Table 80. Sign-on Recovery Calls Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful completion.
4	04	No updates for an authorized database existed for this subsystem; successfully completed.
12	0C	Error deleting in-doubt EEQEs.
16	10	Existing subsystem entry found in RECON data set marked as having recovery processing started.
24	18	Subsystem entry not marked as abnormally terminated and there is no IRLM.
28	1C	No subsystem entry for the calling subsystem in the RECON data set.
32	20	IRLM ids do not match.
36	24	Subsystem not marked as having recovery processing started.
40	28	Internal error encountered during unauthorization.
41	29	Request for subpool 0 storage (24K) failed.
44	2C	Internal DBRC error.
48	30	Invalid parameter found.
56	38	Alternate subsystem is signing on for recovery.
72	48	No PRIOLDS record exists in the RECON for the Online subsystem making the Sign-on Recovery End call.
80	50	No GSG record found in the RECON during Sign-on Recovery Start for an RSR capable system.
84	54	Another tracking subsystem (different ssid) already exists for the GSG (DSPTSIGN).
92	5C	This subsystem is a member of another GSG or no GSG name was specified when restarting an RSR capable SS.

Return Codes from Sign-off Normal Call

Table 81. Sign-off Normal Call Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful completion. Subsystem entry deleted.
8	08	Subsystem entry found in RECON data set marked as abnormally terminated.
12	0C	Subsystem entry found in RECON data set marked as having recovery processing started.

Table 81. Sign-off Normal Call Return Codes (continued)

Decimal	Hexadecimal	Meaning
16	10	No subsystem entry in RECON data set.
32	20	Alternate subsystem IRLM id does not match subsystem record IRLM id.
40	28	Internal error encountered during unauthorization.
44	2C	Internal DBRC error.
48	30	Invalid parameter found.

Return Codes from Sign-off Abnormal Call

Table 82. Sign-off Abnormal Call Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful completion. Subsystem entry deleted.
4	04	Sign-off successfully completed; subsystem entry marked as abnormally terminated.
8	08	Subsystem entry found in RECON data set was already marked as abnormally terminated.
16	10	No subsystem entry in RECON data set.
20	14	Active subsystem is attempting to terminate abnormally with an alternate subsystem available.
32	20	Alternate subsystem IRLM id does not match subsystem record IRLM id.
40	28	Internal error encountered during unauthorization.
44	2C	Internal DBRC error.
48	30	Invalid parameter found.

Return Codes from Authorization Calls

Table 83. Authorization Call Return Codes

Decimal	Hexadecimal	Meaning
0	00	All of the specified databases were authorized.
4	04	The data is already hardened and need not be reapplied.
8	08	At least one or more of the databases and areas could not be authorized, but all other databases and areas were authorized.
12	0C	Subsystem not registered in DBRC.
20	14	Active subsystem calling authorization after a takeover occurred.
44	2C	Internal DBRC error.
48	30	Invalid parameter found.

Return Codes from Unauthorization Call

Table 84. Unauthorization Call Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful completion.
4	04	For function code 2 (unauthorizing a list), successful completion; databases that were updated were not unauthorized. For function code 5 (unauthorizing a Fast Path area), successful completion; the area needs recovery.

Table 84. Unauthorization Call Return Codes (continued)

Decimal	Hexadecimal	Meaning
8	08	Database not registered in RECON data set.
16	10	Subsystem not authorized to use the database.
20	14	One of the following occurred: • Internal DBRC unauthorization error: database and subsystem records do not match. • Previously active subsystem calling for unauthorization after a takeover occurred.
24	18	Internal DBRC or IMS unauthorization error: held state could not be computed by the IMS compatibility evaluation routine.
44	2C	Internal DBRC error.
48	30	Invalid parameter found.

Return Codes from the DB I/O Error Exit

Table 85. DB I/O Error Exit Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful call.
8	08	The database is not registered in the RECON data set.
12	0C	The database data set is not registered in the RECON data set.
16	10	The subsystem is not registered in the RECON data set.
20	14	The subsystem is not authorized to use the database.
28	1C	An EEQE add/delete/replace request could not be satisfied.
44	2C	Internal DBRC error.
48	30	Missing or invalid parameter.

Return Codes from the DB Open Exit

Table 86. DB Open Exit Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful call.
4	04	The database is not registered in the RECON data set.
8	08	A database data set is not registered in the RECON data set.
12	0C	The subsystem is not registered in the RECON data set.
16	10	The subsystem is not authorized to use the database.
20	14	IMS passed a block that is too small to contain the EEQE list.
44	2C	Internal DBRC error.
48	30	Missing or invalid parameter.

Return Codes from Local and Global /START Command

Table 87. Local and Global /START Command Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful completion.
4	04	Database not registered in RECON.

Table 87. Local and Global /START Command Return Codes (continued)

Decimal	Hexadecimal	Meaning
8	08	Read-only user flag is on.
12	0C	Prohibit-further-authorization flag is on.
16	10	Fast Path area needs recovery, or database needs recovery, but the EEQE count is zero.
20	14	Database needs backout.
44	2C	Internal DBRC error.
48	30	Invalid parameter found.

Return Codes from Global /STOP Command

Table 88. Global /STOP Command Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful completion. Prohibit-further-authorization flag turned on.
4	04	Database not registered in RECON data set.
12	0C	Prohibit-further-authorization flag is on.
44	2C	Internal DBRC error.
48	30	Invalid parameter found.

Return Codes from Local and Global /DBD Commands

Table 89. Local and Global /DBD Command Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful completion.
4	04	Database not registered in RECON data set.
12	0C	Prohibit-further-authorization flag is on.
16	10	Fast Path area needs recovery, or database needs recovery, but the EEQE count is zero.
20	14	Database needs backout.
24	18	Database authorized by at least one batch subsystem.
44	2C	Internal DBRC error.
48	30	Invalid parameter found.

Return Codes from Global /DBR Command.

Table 90. Global /DBR Command Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful completion. Prohibit-further-authorization flag is turned on.
4	04	Database not registered in RECON data set.
24	18	Batch systems authorized to use database.
44	2C	Internal DBRC error.
48	30	Invalid parameter found.

Return Codes from OLDS Open Call

Table 91. OLDS Open Call Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful completion.
4	04	There is already an OLDS open for the invoking subsystem.
8	08	The OLDS being opened is invalid. The OLDS contains unarchived data and is needed to close a previous OLDS, or the data set name of the OLDS matches the data set name of another OLDS for the same subsystem.
12	0C	Invocation sequence error. An open secondary OLDS call was made without a corresponding open primary OLDS call.
44	2C	Invalid DBRC error.
48	30	Invalid parameter found.

Return Codes from OLDS Switch Call

Table 92. OLDS Switch Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful completion.
4	04	There is no OLDS of the specified type, primary or secondary, open for the invoking subsystem.
8	08	The OLDS being opened is invalid. The OLDS contains unarchived data and is needed to close a previous OLDS, or the data set name of the OLDS matches the data set name of another OLDS for the same subsystem.
12	0C	Invocation sequence error. A switch secondary OLDS call was made without a corresponding switch primary OLDS call.
44	2C	Internal DBRC error.
48	48	Invalid parameter found.

Return Codes from OLDS Close Call

Table 93. OLDS Close Call Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful completion.
4	04	There is no OLDS of the specified type, primary or secondary, open for the invoking subsystem.
12	0C	Invocation sequence error. A close secondary OLDS call was made without a corresponding close primary OLDS call.
44	2C	Internal DBRC error.
48	30	Invalid parameter found.

Return Codes from OLDS Status Call

Table 94. OLDS Status Call Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful completion.
44	2C	Internal DBRC error.
48	30	Invalid parameter found.

Return Codes from the Last OLDS Call

Table 95. Last OLDS Call Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful completion. One or more OLDS descriptors are returned to the return area.
4	04	Successful completion. One or more SLDS descriptors are returned to the return area.
8	08	There are no log data sets (OLDS or SLDS) known to DBRC. No information is returned.
12	0C	The return area is too small to contain the return data. The required length is returned in the first two bytes of the return area.
44	2C	Internal DBRC error.
48	30	Invalid parameter found.

Return Codes from the Locate Log Record Call

Table 96. Locate Log Record Call Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful completion. One or more OLDS descriptors are returned in the return area.
4	04	Successful completion. One or more SLDS descriptors are returned in the return area.
8	08	There are no log data sets (OLDS or SLDS) known to DBRC. No information is returned.
12	0C	The return area is too small to contain the return data. The required length is returned in the first two bytes of the return area.
16	10	There is no log data set identified in RECON with the specified open time. Used to locate previous log data set and next log data set only.
20	14	An open SLDS was found in the descriptor area.
44	2C	Internal DBRC error.
48	30	Invalid parameter found.

Return Codes from the Archive Init Call

Table 97. Archive Init Call Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful completion.
4	04	When archiving OLDSs: One or more, but not all, of the specified OLDSs were previously archived. Not used for the SLDS copy function.
8	08	Invalid utility input.
12	0C	An invalid volume stop time was specified.
44	2C	Internal DBRC error.
48	30	Invalid parameter found.

Return Codes from the Archive Completion Call

Table 98. Archive Completion Call Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful completion.
8	08	When archiving OLDSs: One or more of the OLDSs being archived has already been archived. The archive utility should terminate processing. Not used when copying an SLDS.
12	0C	An invalid volume stop time was specified.
44	2C	Internal DBRC error.
48	30	Invalid parameter found.

Return Codes from the Archive End-of-Job Call

Table 99. Archive End-of-Job Call Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful completion.
44	2C	Internal DBRC error.
48	30	Invalid parameter found.

Return Codes from the Log Recovery Utility Init Call

Return Codes for SLDS Recovery:

Table 100. SLDS Recovery Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful completion.
12	0C	DBRC initialization failed.

Return Codes for OLDS Recovery:

Table 101. OLDS Recovery Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful completion.
44	2C	Internal DBRC error.
48	30	Invalid parameter found.

Return Codes from the Log Recovery Utility Open Call

Return Codes for SLDS Recovery:

Table 102. SLDS Recovery Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful completion.
4	04	Successful completion. Only the last volume of an SLDS is being processed. No interim SLDS can be created.
8	08	The data set being recovered is not known to DBRC.

Table 102. SLDS Recovery Return Codes (continued)

Decimal	Hexadecimal	Meaning
12	0C	Duplicate RECON records were found for the input data set. The utility should terminate processing.
16	10	Error opening RECON data set. This is an internal DBRC error. The utility should terminate processing.
20	14	Error closing RECON data set. This is an internal DBRC error. The utility should terminate processing.
24	18	Error extracting data set name. This is an internal DBRC error. The utility should terminate processing.
28	1C	I/O error on RECON data set. This is an internal DBRC error. The utility should terminate processing.
32	20	Error freeing extract data area. This is an internal DBRC error. The utility should terminate processing.
52	34	Unable to GETMAIN storage. The utility should terminate processing.
56	38	Undefined function requested.
60	3C	Invalid input. More than one data set was specified on the input DD statement. The utility should terminate processing.

Return Codes for OLDS Recovery:

Table 103. OLDS Recovery Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful completion.
4	04	Invalid utility input. The utility should terminate processing.
16	10	Invalid call. An attempt was made to close the active OLDS of an active subsystem.
20	14	The last block sequence number returned from DBRC for the closing OLDS is zero.
44	2C	Invalid DBRC error.
48	30	Invalid parameter found.

Return Codes from the Log Recovery Utility Close Call

Return Codes for SLDS Recovery:

Table 104. SLDS Log Recovery Utility Close Call Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful completion.
16	10	Error opening RECON data set. This is an internal DBRC error. The utility should terminate processing.
20	14	Error closing RECON data set. This is an internal DBRC error. The utility should terminate processing.
24	18	Error extracting data set name. This is an internal DBRC error. The utility should terminate processing.
28	1C	I/O error on RECON data set. This is an internal DBRC error. The utility should terminate processing.

Table 104. SLDS Log Recovery Utility Close Call Return Codes (continued)

Decimal	Hexadecimal	Meaning
32	20	Error freeing extract data area. This is an internal DBRC error. The utility should terminate processing.
36	24	Error adding the data set entry to the interim log record. The data set entry already exists. The utility should terminate processing.
40	28	Error deleting interim record from RECON. This is an internal DBRC error. The utility should terminate processing.
44	2C	Error obtaining volume serial number of output data set. This is an internal DBRC error. The utility should terminate processing.
52	34	Unable to GETMAIN storage. The utility should terminate processing.
56	38	Undefined function requested.

Return Codes for OLDS Recovery:

Table 105. OLDS Log Recovery Utility Close Call Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful completion.
44	2C	Invalid DBRC error.
48	30	Invalid parameter found.

Return Codes from the Log Recovery Utility End-of-Job Call

Return Codes for SLDS Recovery:

Table 106. SLDS Recovery Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful completion.
48	30	DBRC termination error.
56	38	Undefined function requested.

Return Codes for OLDS Recovery:

Table 107. OLDS Recovery Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful completion.
44	2C	Internal DBRC error.
48	30	Invalid parameter found.

Return Codes from the RELOAD Utility

Table 108. RELOAD Utility Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful completion.
4	04	Database not registered or not found.
8	08	I/O error reading RECON data set.
12	0C	Unknown function.

Table 108. RELOAD Utility Return Codes (continued)

Decimal	Hexadecimal	Meaning
16	10	Feature initialization error.
20	14	Feature termination error.
24	18	RECON open error.
32	20	Internal notify problem.
36	24	RECON close error.
44	2C	IC needed flag already on.

Return Codes from the Begin HSSP Image Copy Call

Table 109. Begin HSSP Image Copy Call Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful call.
4	04	No usable image copy data set found.
12	0C	Area not registered in RECON data set.
16	10	Area does not have REUSE attribute for image copy data sets.
20	14	Request did not complete.
24	18	HSSP image copy already in progress for this area.
44	2C	Internal DBRC error.
48	30	Invalid parameter found.

Return Codes from the End HSSP Image Copy Call

Table 110. End HSSP Image Copy Call Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful call.
8	08	Image copy record specified not found.
12	0C	Area not registered in RECON data set.
16	10	Image copy specified already ended (stoptime>0).
32	20	Request did not complete.
44	2C	Internal DBRC error.
48	30	Invalid parameter found.

Return Codes from the LOGSET Call

Table 111. LOGSET Call Return Codes

Decimal	Hexadecimal	Meaning
00	00	Successful call. (DSPUBK10)
02	02	Successful call, but IMS passed DBRC insufficient storage to return the output. IMS must obtain sufficient storage and re-drive the exit. (DSPUBK10).
08	08	When processing a LOGSET request DBRC found that a later PRILOG with the same SSID contains non-batch backout utility logs. (DSPUBK10)
12	0C	When processing a LOGSET request from IMS, DBRC could not find the specified Log data set in the RECON. DBRC cannot perform Log Verification. (DSPUBK10)

Table 111. LOGSET Call Return Codes (continued)

Decimal	Hexadecimal	Meaning
44	2C	An internal DBRC error occurred.
48	30	DBRC detected an invalid parameter from IMS.

Return Codes from the SAVUOR Call

Table 112. SAVUOR Call Return Codes

Decimal	Hexadecimal	Meaning
00	00	The call ended successfully.
02	02	The call ended successfully, but the caller passed insufficient storage for DBRC to return the output. (DSPUBK00)
04	04	Either a new BACKOUT record was not written because it had no UORs, or an existing BACKOUT record was deleted because all UORs were deleted.
08	08	IMS Control Region Case (DSPUBK20): DBRC's Save Unit of Recovery (SAVUOR) exit processing located the requested DB record in the RECON, but did not find it authorized to the requested subsystem. IMS Batch Backout Case (DSPUBK00): Backouts cannot be saved because the last log is (1) open, or (2) is not for a restart, or (3) the log and the BACKOUT record flag conditions do not match.
12	0C	DBRC could not find the requested log data set in the RECON, making log verification impossible. (DSPUBK00)
16	10	DBRC found that the subsystem is not authorized to use a database, or the database is not recoverable. The backout counts cannot be updated. (DSPUBK00)
40	28	DBRC found that the USID for a database entry passed in the DSPUORLS parameter list is less than the current hardened USID for the database in the RECON. DBRC sets a field in the entry to show this condition and returns to the caller with a return code of 40 (RC40).
44	2C	DBRC encountered an internal error.
48	30	DBRC encountered an invalid parameter.

Return Codes from the UPDUOR Call

Table 113. UPDUOR Call Return Codes

Decimal	Hexadecimal	Meaning
00	00	Successful call.
04	04	When processing an UPDUOR request from the IMS Batch Backout Utility, DBRC found the database is not registered. (DSPUBK00) When processing an UPDUOR request from the IMS Control Region, DBRC could not find a BACKOUT record in the RECON for the SSID that IMS specified. (DSPUBK20)
08	08	When processing an UPDUOR request from the IMS Batch Backout Utility, DBRC found that the subsystem is not authorized to use the Database. (DSPUBK00) When processing an UPDUOR request from the IMS Control Region, DBRC found that either the subsystem is not authorized to use a database, or a database is not recoverable. DBRC cannot update the Backout counts in the DB header record in the RECON. (DSPUBK20)

Table 113. UPDUOR Call Return Codes (continued)

Decimal	Hexadecimal	Meaning
12	0C	When processing an UPDUOR request from the IMS Batch Backout Utility, DBRC found that either no BACKOUT record exists or there are no UORs for this subsystem. Update is not possible. (DSPUBK00) When processing an UPDUOR request from the IMS Control Region, DBRC found that either the BACKOUT record or the UOR List has no UORs to update. (DSPUBK20)
16	10	When processing an UPDUOR request from the IMS Batch Backout Utility, DBRC found that at least one UOR or database that was passed in the list has already been backed out or does not exist in the BACKOUT record. (DSPUBK00) When processing an UPDUOR request from the IMS Control Region, DBRC found that an UPDATE UOR has been attempted for a database unknown to the BACKOUT record. An incorrect Backout might have been done. (DSPUBK20)
40	28	DBRC found that the USID for a database entry passed in the DSPUORLS parameter list is less than the current hardened USID for the database in the RECON. DBRC sets a field in the entry to show this condition and returns to the caller with a return code of 40 (RC40).
44	2C	An internal DBRC error occurred.
48	30	DBRC detected an invalid parameter from IMS.

Return Codes from the VERUOR Call

Table 114. VERUOR Call Return Codes

Decimal	Hexadecimal	Meaning
00	00	Successful call. (DSPUBK10 or DSPUBK20)
02	02	Successful call, but IMS passed DBRC insufficient storage to return the output. IMS must obtain sufficient storage and re-drive the exit. (DSPUBK10 or DSPUBK20)
04	04	No BACKOUT record found for this SSID. (DSPUBK10 or DSPUBK20)
12	0C	When processing a VERUOR request from the IMS Control Region DBRC found that either the BACKOUT record or the UOR list has no UORs to verify. (DSPUBK20)
44	2C	An internal DBRC error occurred. (DSPUBK10 or DSPUBK20)
48	30	DBRC detected an invalid parameter from IMS. (DSPUBK10 or DSPUBK20)

Return Codes from New Update Set ID Validation

Table 115. New Update Set ID Validation Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful completion.
4	04	Requested USID is already marked as hardened.
8	08	The currently authorized USID is not yet complete.
12	0C	The specified USID is not the next one to be applied.
16	10	The database or area is not authorized.
20	14	The database needs recovery.
44	2C	An internal DBRC error occurred.
48	30	An invalid parameter was found.

Return Codes from End of Active Log Stream Notification

Table 116. End of Active Log Stream Notification Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful completion.
8	08	An invalid PRILOG time was specified.
44	2C	An internal DBRC error occurred.
48	30	An invalid parameter was found.

Return Codes from Tracking Log OPEN, CLOSE, and DELETE

Table 117. Tracking Log OPEN, CLOSE, and DELETE Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful completion.
8	08	Invalid (zero) data set start or stop time. (CLOSE)
12	0C	Invalid first log sequence number (LSN). Could not find matching data set. (CLOSE and DELETE)
16	10	Data set already exists. (OPEN)
20	14	One or more new data set LSNs overlap previous or next data set LSN range. (OPEN and CLOSE)
24	18	Zero PRILOG Start time value.
28	1C	Zero PRILOG Token value. (OPEN)
32	20	No log release level.
44	2C	An internal DBRC error occurred.
48	30	An invalid parameter was found.

Return Codes from End Tracking of Active Updates

Table 118. End Tracking of Active Updates Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful completion.
4	04	The database is not currently authorized.
44	2C	An internal DBRC error occurred.
48	30	An invalid parameter was found.

Return Codes from Early End of Database Tracking

Table 119. Early End of Database Tracking Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful completion.
44	2C	An internal DBRC error occurred.

Return Codes from Online Forward Recovery (OFR) Exit

Table 120. Online Forward Recovery (OFR) Exit Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful completion.
4	04	All of the databases are current and do not require OFR.
8	08	OFR is invalid for one or more of the databases.
12	0C	OFR is invalid for all of the databases.
44	2C	An internal DBRC error occurred.
48	30	An invalid parameter was found.

Return Codes from End of Online Forward Recovery (OFR) Exit

Table 121. End of Online Forward Recovery (OFR) Exit Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful completion.
8	08	Invalid OFR identifier.
12	0C	Invalid database or area name.
44	2C	An internal DBRC error occurred.
48	30	An invalid parameter was found.

Return Codes from Get Service Group List

Table 122. Get Service Group List Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful completion.
8	08	The GSG name is not defined in RECON.
44	2C	An internal DBRC error occurred.
48	30	A required parameter was not specified on the exit invocation.

Return Codes from Query Log Data Sets

Table 123. Query Log Data Sets Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful completion.
8	08	An error was encountered while processing one or more of the gap descriptors.
12	0C	Invalid gap fill request.
44	2C	An internal DBRC failure occurred.
48	30	A required parameter was not specified on the exit invocation.

Return Codes from Query Global Service Group PRILOG Tokens

Table 124. Query Global Service Group PRILOG Tokens Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful completion.
4	2C	Specified GSG not defined to DBRC.

Table 124. Query Global Service Group PRILOG Tokens Return Codes (continued)

Decimal	Hexadecimal	Meaning
48	30	A required parameter was not specified on the exit invocation.

Return Codes from Query Tracking Log Gap Descriptors

Table 125. Query Tracking Log Gap Descriptors Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful completion.
4	2C	DBRC has no knowledge of the specified active subsystem, or there are no active subsystems for the current GSG.
44	2C	An internal DBRC failure occurred.
48	30	A required parameter was not specified on the exit invocation.

Return Codes from RSR Takeover Request (Planned or Unplanned)

Table 126. RSR Takeover Request (Planned or Unplanned) Return Codes

Decimal	Hexadecimal	Meaning
0	00	Successful completion.
8	08	There is at least one abnormally terminated subsystem record in RECON.
12	0C	No GSG record is defined to DBRC.
44	2C	An internal DBRC failure occurred.
48	30	A required parameter was not specified on the exit invocation.

Error Conditions for Message DSP0266I

A NOTIFY.SECLOG OLDS or a NOTIFY.PRI/SECLOG OLDS INTERIM was issued. However the information supplied in the command is inconsistent with the existing information in the RECON data set. Table 127lists the possible error conditions.

Table 127. Possible Error Conditions for Message DSP0266I

Type of Notification	For Record	Corresponding Record	Has Status of or Has Error Condition	INSRT1 Will Be	INSRT2 Will Be
OPEN	SECOLDS	PRIOLDS	ARCHIVED-SCHEDULED or ARCHIVED- STARTED or ARCHIVED-COMPLETE	SECOLDS	STATUS
OPEN	IPRIOLDS	PRIOLDS	ARCHIVED-STARTED or ARCHIVED-COMPLETE	IPRIOLDS	STATUS
OPEN	ISECOLDS	IPRIOLDS	ARCHIVED-COMPLETED or ARCHIVED-STARTED	SECOLDS	STATUS
CLOSE	SECOLDS	PRIOLDS	Status other than ARCHIVED-NEEDED or SECOLDS STOPTIME points to PRIOLDS STOPTIME	SECOLDS SECOLDS	STATUS RUNTIME
CLOSE	IPRIOLDS	PRIOLDS	Status other than ARCHIVED-NEEDED or IPRIOLDS STOPTIME points to PRIOLDS STOPTIME	IPRIOLDS IPRIOLDS	STATUS RUNTIME

Table 127. Possible Error Conditions for Message DSP0266I (continued)

Type of Notification	For Record	Corresponding Record	Has Status of or Has Error Condition	INSRT1 Will Be	INSRT2 Will Be
CLOSE	ISECOLDS	IPRIOLDS	Status other than ARCHIVED-NEEDED or ISECOLDS STOPTIME points to IPRIOLDS STOPTIME	SECOLDS SECOLDS	STATUS RUNTIME

HALDB Partition Definition Utility Messages (DSPMxxx)

DSPM000I (C) Copyright IBM Corp. 1999. All rights reserved.

Explanation: IBM's copyright statement.

DSPM001I Database information for *dbname* was not found.

Explanation: The database indicated by *dbname* was not found in the DBDLIB data sets searched. The DBDLIB data sets that were searched are allocated under a file name of 'IMS'.

Programmer Response: Check the concatenation for 'IMS' to ensure the proper DBDLIB data sets are allocated.

| **Module:** DSPXPDDU

DSPM002I An error condition occurred. Details of the error are shown in the SYSPRINT file.

Explanation: DBRC returned messages during an internal call. The SYSPRINT file will be displayed.

System Action: The SYSPRINT file is displayed.

Programmer Response: The SYSPRINT file contains other messages. Respond to those messages as appropriate.

| **Module:** DSPXPDDU

DSPM003I Option *n* is not valid for this application.

Explanation: The HALDB panel displays a menu of options. Only the options listed in the menu can be specified.

System Action: The HALDB panel is displayed until a valid option is specified or until the Exit key is pressed.

Programmer Response: Choose an option from the menu and type its number in the **Option** field.

| **Module:** DSPXPDDU

| **Module:** DSPXPDDU

DSPM004I This application cannot execute on this release of ISPF.

Explanation: An older version of ISPF was detected. The HALDB Partition Definition utility only works in ISPF version 4.2 and later.

System Action: The HALDB Partition Definition utility ends and the previously shown ISPF panel displays again.

Programmer Response: Make sure that ISPF 4.2 or later is installed and available to the user.

Problem Determination: Check the normal search order (ISPLLIB, STEPLIB, link list, and LPA list) to ensure that the required level of ISPF is being used.

| **Module:** DSPXPDDU

DSPM005I Load module DSPPDI00 could not be loaded.

Explanation: The DBRC utility module could not be loaded.

System Action: The HALDB Partition Definition utility ends.

Programmer Response: Make sure the IMS installer provided the load module data sets to your TSO user environment.

Problem Determination: Make sure one of the data sets in the normal search order (ISPLLIB, STEPLIB, TSOLIB, link list, and LPA list) contains the IMS SDFSRESL data set.

| **Module:** DSPXPDDU

DSPM006I DBRC initialization failed. rc = *rc*

Explanation: DBRC encountered an error during initialization. *rc* indicates the nature of the error and generally has meaning only to IBM service representatives. However, this message displays when a message file is displayed. The message file contains more specific error messages.

System Action: The HALDB Partition Definition utility ends.

Programmer Response: Resolve the problems with

DBRC. There might also be problems with the RECON data sets.

Problem Determination: If the SYSPRINT file is displayed, respond to the messages it displays. If no SYSPRINT file exists, look in the MVS SYSLOG file for information on additional messages.

| **Module:** DSPXPDDU

DSPM007I Duplicate partition IDs were encountered. id = *id*

Explanation: The ID that was encountered during IMPORT has already been defined for this database.

System Action: Only the first partition with the duplicated ID is displayed.

Programmer Response: If the `IMPORT` command for partition definitions was issued and the STOP ON FIRST ERROR option was specified, select the TRY ALL PARTITIONS option to import the remaining partitions.

Problem Determination: A partition ID must be unique within the database. If there are duplicate partition IDs, make sure that the import data set was created for this database.

| **Module:** DSPXPDDU

DSPM008I Table add error: not all partitions can be displayed. tbadd rc = *rc*

Explanation: The list of partitions might not be complete. An error occurred while composing the list for display.

System Action: The new partition is not included in the list of displayed partitions.

Programmer Response: Check the TBADD return code shown in the message for an indication of the cause of the error. For additional information, see the *OS/390 Interactive System Productivity Facility (ISPF): Services Guide*

Problem Determination: The TBADD return code indicates the type of problem encountered. A typical problem is duplicate table rows.

| **Module:** DSPXPDDU

DSPM009I Database *dbname* **is not a partitioned database.**

Explanation: The database in the message, as indicated by *dbname*, has not been defined as a HALDB.

System Action: The previous panel is displayed again.

Programmer Response: Select another database or check the DBD generation to make sure the selected database is defined as a HALDB.

Problem Determination: Make sure that the DBD generation defines this database as a HALDB. Make sure that the correct definition is in the DBDLIB data sets that are allocated in the IMS file name.

| **Module:** DSPXPDDU

DSPM010I Changes to the partition were canceled by the CANCEL command.

Explanation: The partition definition panel or the partition modification panel was displayed but instead of pressing the Enter key to process, the Cancel key was pressed.

System Action: The partition was not defined or modified. Any data typed into the panel is discarded when the Cancel key is pressed.

| **Module:** DSPXPDDU

DSPM011I Partition *name* **was added successfully.**

Explanation: DBRC successfully added the new partition.

| **Module:** DSPXPDDU

DSPM012I Partition *name* **was changed successfully.**

Explanation: DBRC successfully processed the changes to the partition definition.

| **Module:** DSPXPDDU

DSPM013I Partition *name* **was deleted successfully.**

Explanation: The partition was successfully deleted from the RECON data set.

| **Module:** DSPXPDDU

DSPM014I *Count* **partitions were added successfully.**

Explanation: New partitions were added. *Count* represents the number of partitions that were added.

| **Module:** DSPXPDDU

DSPM015I *Count* **partitions were deleted.**

Explanation: Several partitions were deleted. *Count* represents the number of partitions that were deleted.

| **Module:** DSPXPDDU

DSPM016I Information about partition *name* was printed successfully.

Explanation: Information about the partition was saved to the ISPF list file.

Module: DSPXPDDU

DSPM017I Information about *count* partitions were printed.

Explanation: Information about several partitions was saved to the ISPF list file. *Count* represents the number of partitions that were processed.

Module: DSPXPDDU

DSPM018I Changes to the database were canceled by CANCEL command.

Explanation: Changes to the HALDB master information were not confirmed by pressing the Enter key. The Cancel key was pressed instead.

System Action: The information was not saved to the RECON data sets.

Module: DSPXPDDU

DSPM019I Table *member* was created successfully to data set *dsname*.

Explanation: The export function saved information about the HALDB as a member of the partitioned data set.

Module: DSPXPDDU

DSPM020I Database definition was canceled by the CANCEL command.

Explanation: The database definition panel was displayed but the user pressed the Cancel key instead of the Enter key.

System Action: The database was not defined in the RECON data set.

Programmer Response: If the Cancel key was pressed by mistake, you must define the database attributes again and press the Enter key.

Module: DSPXPDDU

DSPM021I Partition *name* was not added to the list displayed by ISPF. tbadd rc = *rc*

Explanation: The partition, indicated by *name*, was defined successfully in the RECON data set, but could not be added to the list of displayed partitions.

System Action: When the partition list displays, it will not contain the partition indicated by *name*.

Programmer Response: There was an error in the ISPF services used to display the partition list. Try exiting ISPF or logging off of the system, then restart the HALDB Partition Definition utility.

Problem Determination: The TBADD return code indicates the type of problem encountered. A typical problem is duplicate table rows. Check the return code, indicated by *rc*, in the z/OS Interactive System Productivity Facility manuals for an indication of the problem. For additional information, see the *OS/390 Interactive System Productivity Facility (ISPF): Services Guide*.

Module: DSPXPDDU

DSPM022I Partition *name* was not changed on the list displayed by ISPF. tbmod rc = *rc*

Explanation: The partition was changed successfully in the RECON data set, but could not be changed in the list of displayed partitions.

System Action: When the partition list displays, it will not show the changes to the partition indicated by *name*.

Programmer Response: There was an error in the ISPF services used to display the partition list. Try exiting ISPF or logging off of the system, then restart the HALDB Partition Definition utility.

Problem Determination: The TBMOD return code indicates the type of problem encountered. A typical problem is duplicate table rows. Check the return code, indicated by *rc*, in the z/OS Interactive System Productivity Facility manuals for an indication of the problem. For additional information, see the *OS/390 Interactive System Productivity Facility (ISPF): Services Guide*.

Module: DSPXPDDU

DSPM023I Partition *name* was not deleted from the list displayed by ISPF. tbdelete rc = *rc*

Explanation: The partition was deleted successfully from the RECON data set, but could not be deleted from the list of displayed partitions.

System Action: When the partition list displays, it shows the partition indicated by *name*.

Programmer Response: There was an error in the ISPF services used to display the partition list. Try exiting ISPF or logging off of the system, then restart the HALDB Partition Definition utility.

Problem Determination: The TBDELETE return code indicates the type of problem encountered. A typical problem is duplicate table rows. Check the return code, indicated by *rc*, in the z/OS Interactive System Productivity Facility manuals for an indication of the problem. For additional information, see the *OS/390*

Interactive System Productivity Facility (ISPF): Services Guide.

Module: DSPXPDDU

DSPM024I Unknown line command or action bar combination. line command: *command*

Explanation: A line command was typed in the partition list panel but was not recognized as a valid command.

Programmer Response: Display the help text by pressing F1. Determine which line commands are available. Enter the desired line command in the **Act** column.

Module: DSPXPDDU

DSPM025I Enter a numeric value between *low* **and** *high*

Explanation: The field requires a numeric value within a specific range, indicated by *low* and *high*.

Module: DSPXPDDU

DSPM026I New table *member* **was not created. tbsave rc =** *rc*

Explanation: The new table was not created. *rc* is the return code from the ISPF tbsave service.

System Action: The table is not saved into the specified data set. The Export a Database panel remains displayed.

Programmer Response: Make sure the output data set exists, that it is a partitioned data set, and that it is fixed-block with 80 byte records.

Problem Determination: The TBSAVE return code indicates the type of problem encountered. A typical problem is duplicate table rows. Check the return code, indicated by *rc*, in the z/OS Interactive System Productivity Facility manuals for an indication of the problem. For additional information, see the *OS/390 Interactive System Productivity Facility (ISPF): Services Guide*.

Module: DSPXPDDU

DSPM027I Data set *dsname* **is not cataloged. libdef rc =** *rc*

Explanation: The data set indicated by *dsname* is not cataloged.

System Action: The export or import is not performed. The message displays and the panel continues to display.

Programmer Response: Make sure that the name of the data set specified in the panel is spelled correctly, and that the data set actually exists.

Module: DSPXPDDU

DSPM028I Changes for *changed* **of** *total* **partitions processed.**

Explanation: More than one partition was changed. In the message text:

changed
Indicates the number of partitions that were changed.

total If the CHANGE ALL PARTITIONS option was specified, *total* identifies the number of defined partitions. If the CHANGED SELECTED PARTITIONS option was selected, *total* indicates the number of partitions that were selected.

Module: DSPXPDDU

DSPM029I Changes for *changed* **of** *total* **partitions processed.** *Count* **errors encountered.**

Explanation: More than one partition was selected to be changed, but some of the specified changes were not performed. In the message text:

changed
Indicates the number of partitions that were changed.

total If the CHANGE ALL PARTITIONS option was specified, *total* identifies the number of defined partitions. If the CHANGED SELECTED PARTITIONS option was selected, *total* indicates the number of partitions that were selected.

Count Indicates the number of partitions that were not changed.

System Action: The partition list displays again.

Programmer Response: Make sure the partitions are available for use, then attempt the change again.

Module: DSPXPDDU

DSPM030I Database definition was not performed. DBRC rc = *rc* **reason =** *code***.**

Explanation: The database was not defined in RECON. An internal error in the IMS HALDB Partition Definition utility was detected. *rc* and *code* indicate the nature of the error. Generally, the values have meaning only to IBM service representatives.

System Programmer Response: If the problem persists, contact the IBM Support Center for assistance.

Module: DSPXPDDU

DSPM031I Partition *name* was not added. DBRC rc = *rc* reason = *code*.

Explanation: The new partition could not be defined in RECON. An internal error in the IMS HALDB Partition Definition utility was detected. *rc* and *code* indicate the nature of the error. Generally, the values have meaning only to IBM service representatives.

System Programmer Response: If the problem persists, contact the IBM Support Center for assistance.

Module: DSPXPDDU

DSPM032I Partition *name* was not changed. DBRC rc = *rc* reason = *code*.

Explanation: The partition could not be changed in DBRC. An internal error in the IMS HALDB Partition Definition utility was detected. *rc* and *code* indicate the nature of the error. Generally, the values have meaning only to IBM service representatives.

System Programmer Response: If the problem persists, contact the IBM Support Center for assistance.

Module: DSPXPDDU

DSPM033I Partition *name* was not deleted. DBRC rc = *rc* reason = *code*.

Explanation: The partition could not be deleted from RECON. An internal error in the IMS HALDB Partition Definition utility was detected. *rc* and *code* indicate the nature of the error. Generally, the values have meaning only to IBM service representatives.

System Programmer Response: If the problem persists, contact the IBM Support Center for assistance.

Module: DSPXPDDU

DSPM034I Database *dbname* was not deleted. DBRC rc = *rc* reason = *code*.

Explanation: The database indicated by *dbname* was not deleted from RECON. *rc* and *code* indicate the nature of the error. Generally, the values have meaning only to IBM service representatives.

System Programmer Response: If the problem persists, contact the IBM Support Center for assistance.

Module: DSPXPDDU

DSPM035I Database *name* was deleted successfully.

Explanation: The database was deleted from the RECON data set.

Module: DSPXPDDU

DSPM036I You must type '/' to confirm the deletion of the database.

Explanation: User did not enter '/' for confirmation.

Module: DSPXPDDU

DSPM037I ISPF table error: the change can not be performed. tbquery rc = *rc*.

Explanation: An internal error occurred while the partition information was being processed for display.

System Action: The partition information is not displayed.

Programmer Response: Restart the partitioning application.

Module: DSPXPDDU

DSPM038I Group information has not been set. Use the 'groups' function key to set it.

Explanation: The partition is defined with multiple data set groups, but not all of the groups are defined.

System Action: The panel displays until the Groups or Cancel key is pressed.

Programmer Response: Set or confirm Information for each group.

Module: DSPXPDDU

DSPM039I Database *dbname* has an access method of '*type*'. Partitioning is not supported for that access method.

Explanation: The HALDB Partition Definition utility does not support the access method listed.

System Action: No processing is performed.

Programmer Response: Make sure the access method in the DBD generation is correct.

Problem Determination: Make sure the database name is correct and that the access method is specified correctly in the DBD generation. Make sure that the correct DBDLIB data set is in the IMS file name.

Module: DSPXPDDU

DSPM040I Enter a numeric value, 0 or a value between 2 and 100.

Explanation: The value for the free block frequency factor (FBFF) was not valid.

Programmer Response: Enter a number between 0 and 100, except for 1.

Module: DSPXPDDU

DSPM041I Enter an even numeric value for block size, less than 32766.

Explanation: The value for the block size can only be an even number. The maximum value is 32766.

Programmer Response: Enter an even numeric value for the block size, less than 32766.

| **Module:** DSPXPDDU

DSPM042I The maximum number of partitions has been reached.

Explanation: The number of partitions for a database has been reached.

System Action: The specified partition was not defined.

Programmer Response: Delete obsolete partitions to keep from exceeding the maximum, then define new partitions.

| **Module:** DSPXPDDU

DSPM043I The partition high key length of *keylength* is longer than the root key length of *rootlength* at line *line*.

Explanation: The partition high key is too long. The high key is longer than the root key length specified during DBDGEN.

System Action: The partition is not created or modified if the key is too long.

Programmer Response: Reduce the length of the high key to less than or equal to the length of the root key.

| **Module:** DSPXPDDU

DSPM044I Duplicate high key values were encountered.

Explanation: The partition high key values must be unique for each partition when the database does not have a Partition Selection exit routine.

System Action: The partition is not created or modified if a partition with the same key already exists.

Programmer Response: Change the partition high key to a unique value.

Problem Determination: If you are unsure of the keys that are already in use, return to the **Database Partitions** panel and display the partition high keys. When you create a new partition, select a key that is unique.

| **Module:** DSPXPDDU

DSPM045I The value for 'Recoverable?' must be Y (Yes), N (No) or blank.

Explanation: Specifies whether or not the Database Image Copy utility or the Online Database Image Copy utility is to recover previously defined image copy data sets.

System Action: The panel displays until an acceptable value is entered.

Programmer Response: Enter a valid value:

YES The database is recoverable.

NO The database is not recoverable.

blank If the value is left blank, it defaults to YES.

You can spell out YES or NO, or use the first letter of the word. YES is the default. If a global service group is specified, the recoverable field must be YES.

| **Module:** DSPXPDDU

DSPM046I The value for 'Reusable?' must be Y (Yes), N (No) or blank.

Explanation: Specifies whether or not the Database Image Copy utility or the Online Database Image Copy utility are to reuse previously defined image copy data sets.

System Action: The panel displays until an acceptable value is entered.

Programmer Response: Enter a valid value:

YES The previously defined image copy data sets will be reused.

NO The previously defined image copy data sets will not be reused.

blank If the value is left blank, it defaults to NO.

You can spell out YES or NO, or use the first letter of the word. NO is the default value.

| **Module:** DSPXPDDU

DSPM047I Enter Y (Yes) or N (No).

Explanation: Provide a yes or no value to select processing for the AUTOMATIC DEFINITION or USE DEFAULTS FOR DS GROUPS options. The cursor location identifies which field is required.

YES Specifying YES for AUTOMATIC DEFINITION allows multiple partitions to be created without intervention. Specifying YES for USE DEFAULTS FOR DS GROUPS allows partitions to be created with defaults from the data set group information.

NO Specifying NO for AUTOMATIC DEFINITION allows the user to serially create partitions.

Specifying NO for USE DEFAULTS FOR DS GROUPS forces the user to provide data set group information.

System Action: The panel displays until you enter a value.

Programmer Response: Enter a valid value. You can spell out YES or NO, or use the first letter of the word.

| **Module:** DSPXPDDU

DSPM049I The partition name model will not allow *count* partitions to be created.

Explanation: The input data set contained more high key values or partition selection strings than the model allows.

System Action: No partitions are created until the model supports the number of partitions identified in the input data set.

Programmer Response: Take one of the following actions:

- Add additional '%' characters to the model
- Remove unnecessary keys from the input data set

| **Module:** DSPXPDDU

DSPM050I There are too many data lines. Only one line is acceptable.

Explanation: The key string can only be on one line in the editor.

System Action: The key string cannot be saved until the extra lines are removed.

Programmer Response: Scroll to the right to add more information on the first line. You can use the TF (text flow) line command in the editor line command area to combine multiple lines into one.

| **Module:** DSPXPDDU

DSPM051I The value is not a valid hex string.

Explanation: The key string is declared as a hexadecimal string, but it contains values that are not valid characters. The hexadecimal format is in the form of X'nn' or 'nn'X; X'nn' can contain characters 0 through 9, A through F, and a through f.

System Action: The key string is not saved until the syntax is corrected.

Programmer Response: Enter valid hexadecimal characters for the key string.

| **Module:** DSPXPDDU

DSPM052I A hex string must have an even number of hex digits.

Explanation: The key string is declared as a hexadecimal string; there must be an even number of hexadecimal characters within the string value but there aren't. The hexadecimal format is in the form of X'nn' or 'nn'X; X'nn' can contain characters 0 through 9, A through F, and a through f.

System Action: The key string is not saved until the syntax is corrected.

Programmer Response: Change the key string so that it contains an even number of hexadecimal characters, for example: X'34'

| **Module:** DSPXPDDU

DSPM053I There are conflicting string types: *prefix* and *suffix*

Explanation: A key string type can be in either character or hexadecimal format. The type of format can be identified by the leading or trailing character. In this case, the type could not be determined.

System Action: The key string is not saved until the syntax is corrected.

Programmer Response: Change the syntax of the key string so that it does not contain both prefix and suffix characters.

| **Module:** DSPXPDDU

DSPM054I Unknown prefix: *prefix*

Explanation: The format for a key string could not be determined. A key string type can be in either character or hexadecimal format.

System Action: The key string is not saved until the syntax is corrected.

Programmer Response: Define the format for the key string by using the character C for character or X for hexadecimal.

| **Module:** DSPXPDDU

DSPM055I Unknown suffix: *suffix*

Explanation: The format for a key string could not be determined. A key string type can be in either character or hexadecimal format.

System Action: The key string is not saved until the syntax is corrected.

Programmer Response: Define the format for the key string by using the character C for character or X for hexadecimal.

| **Module:** DSPXPDDU

DSPM056I There is an unrecognized string type at end of string: *suffix*

Explanation: The format for a key string could not be determined. A key string type can be in either character or hexadecimal format.

System Action: The key string is not saved until the syntax is corrected.

Programmer Response: Define the format for the key string by using the character C for character or X for hexadecimal.

Module: DSPXPDDU

DSPM057I The high key value or partition selection string was longer than 256 bytes.

Explanation: The data for the high key value or partition selection string was too long. The maximum length is 256 bytes.

System Action: The key string is not saved until the syntax is corrected.

Programmer Response: Change the key string so that it is only 256 bytes long.

Module: DSPXPDDU

DSPM058I Enter an RSR tracking type of Dbtrack or Rcvtrack.

Explanation: The RSR tracking type is an optional parameter. The two types of RSR tracking are: DBTRACK or RCVTRACK.

System Action: DBTRACK is used as the default if no type is provided.

Programmer Response: Specify an RSR tracking type of Dbtrack or Rcvtrack. You can use the abbreviations of D or R to specify the type.

Module: DSPXPDDU

DSPM059I An RSR tracking type was specified but a global service group was not.

Explanation: The RSR tracking type is an optional parameter and is used to specify the type of RSR tracking (shadowing) for an area assigned to a global service group. The type, RCVTRACK or DBTRACK, cannot be specified without an RSR Global Service Group being defined for the HALDB master.

System Action: The HALDB information is not saved until the **RSR Global Service Group** field is filled in or the RSR tracking type is blank. The global service group must be registered to the RECON data sets in use.

Programmer Response: Take one of the following actions:

- Provide a global service group
- Remove the RSR tracking type

Module: DSPXPDDU

DSPM060I Chars *'text'***- not found in any partition.**

Explanation: The find command did not find the desired text. The find command searched from the current table position to the bottom of the partition list.

Programmer Response: Press the PF5 key to repeat the search from the top of the list. If the search string is not found in any partition, make sure the search string is correct.

Module: DSPXPDDU

DSPM061I Duplicate partition named *partition* **already exists.**

Explanation: Partition names must be unique. The partition name indicated by *partition* has already been defined for this database.

System Action: The partition is not created and the panel continues to display.

Programmer Response: Change the partition name so that it is unique.

Module: DSPXPDDU

DSPM062I The input data set, *inputds***, contains no key or string values.**

Explanation: The input data set must contain records with key or string values. The input data set indicated by *inputds* did not have any records containing key or string values.

System Action: No partitions are created until the input data set contains valid records.

Programmer Response: Use the editor to add new records.

Module: DSPXPDDU

DSPM063I The input data set, *inputds***, contains blank lines.**

Explanation: The input data set indicated by *inputds* contains lines which have no key or string values.

System Action: No partitions are created until the input data set contains valid records.

Programmer Response: Use the editor to remove the empty lines or add an asterisk to turn them into comment lines.

Module: DSPXPDDU

DSPM064I THE DATABASE *dbname*, IS NOT DEFINED IN RECON

Explanation: The name of the database you specified was not defined in RECON as a HALDB.

Programmer Response: Verify that the data set name is specified correctly. If the name is correct, make sure the proper RECON data sets are being used.

| **Module:** DSPXPDDU

DSPM065W A problem exists with import data set *name*: *description*

Explanation: The import data set indicated by *name* cannot be processed. The message displays information returned by the SYSDSN function of the REXX language.

System Action: The import is not performed because there is a problem with the import data set.

Programmer Response: Resolve the problem that is identified in the message. If the data set does not exist, make sure you specified the name correctly.

| **Module:** DSPXPDDU

DSPM066I Search for 'string' was successful.

Explanation: The search found the specified character.

| **Module:** DSPXPDDU

DSPM067I 'string' was not found. Press RFIND key to continue from top.

Explanation: The search did not find the specified character.

Programmer Response: Press the RFIND key to continue the search from the top of the partition list.

| **Module:** DSPXPDDU

DSPM068I Find cancelled by the cancel command.

Explanation: The find request was not processed because the user pressed the cancel key.

| **Module:** DSPXPDDU

DSPM069I Group information has been set.

Explanation: The group information has been set as part of the definition of a partition or as part of the partition defaults; however, the information is not actually saved until the partition is saved.

| **Module:** DSPXPDDU

DSPM070I Database *dbname* is already registered in RECON, but not as a partitioned database.

Explanation: The database is already registered in the RECON data set; however, it is not defined in RECON as a HALDB.

System Action: The HALDB is not defined in the RECON data set.

Programmer Response: Remove the database from RECON, define it as a HALDB, then add the database back to RECON.

| **Module:** DSPXPDDU

DSPM072W Character or hex string does not start or end properly at line *linenum*.

Explanation: The key string started with "C'" or "X'" but did not end with a quote character, or the key string started with a quote character but did not end with a "'C" or "'X".

System Action: Partitions are not created until the input data set is correct.

Programmer Response: Change the key string at the line specified in the message so that it contains the proper syntax.

| **Module:** DSPXPDDU

DSPM073W Hex string contains characters other than a/f, A/F or 0/9 at line *linenum*.

Explanation: The hexadecimal string contains an illegal character at the line indicated by *linenum*.

System Action: Partitions are not created until the input data set is correct.

Programmer Response: Enter valid hexadecimal characters for the hexadecimal string. Valid characters are A-F, a-f, and 0-9.

| **Module:** DSPXPDDU

DSPM074W Null string is found at line *linenum*.

Explanation: A null string (a string with no contents) is not allowed.

System Action: Partitions are not created until the input data set is correct.

Programmer Response: You can delete the line, add a character to the string, or put an asterisk in column 1 (to make it a comment).

| **Module:** DSPXPDDU

DSPM075W A blank line is found at line *linenum*.

Explanation: A blank line is not allowed in the input file.

System Action: Partitions are not created until the input data set is correct.

Programmer Response: Remove the blank line or replaced it with valid data.

Module: DSPXPDDU

DSPM076W Length of character key > 256 or hex key > 512 at line *linenum*.

Explanation: The length of a key string exceeds the maximum value allowed.

System Action: Partitions are not created until the input data set is correct.

Programmer Response: The key string was too long. Change the key string so that the length is less than or equal to 256 characters.

Module: DSPXPDDU

DSPM077W Hex string does not contain even numbers of characters at line *linenum*.

Explanation: A hexadecimal string was encountered that contains an odd numbers of characters. Even numbers of characters are required.

System Action: Partitions are not created until the input data set is correct.

Programmer Response: Change the hexadecimal string so that there are an even number of hexadecimal digits.

Module: DSPXPDDU

DSPM078W x/X for hex string or c/C for character string appear at both start and end of the string at line *linenum*.

Explanation: Only one x/X or c/C character is allowed in the string in only one location, at the start or end of the string.

System Action: Partitions are not created until the input data set is correct.

Programmer Response: Remove the leading or trailing key string identifier (an X or a C). It is usually easier to remove the trailing identifier.

Module: DSPXPDDU

DSPM080W OPEN table failed. Check data set/member name specified on the panel.

Explanation: Data set or data member specified on the panel cannot be found, or the member specified is not a valid table name.

System Action: The table could not be opened. The import is not performed.

Programmer Response: Make sure that the data set and member exist. Make sure that the data set is not in use by someone else.

Module: DSPXPDDU

DSPM081W Import failed for partition *name* because of DBRC rc = *code*

Explanation: The import failed because DBRC detected an error while processing the database indicated by *name*. An internal error in the IMS HALDB Partition Definition utility was detected. *code* indicates the nature of the error. Generally, the values have meaning only to IBM service representatives.

System Action: The import is not performed for the partition. Other partitions might have been imported successfully.

Programmer Response: There is usually a more specific message describing the error in the log file. If the problem persists, contact the IBM Support Center for assistance.

Module: DSPXPDDU

DSPM082W *Count* of a total *count2* partitions from table name were imported to database successfully.

Explanation: The partitions were successfully imported into the database. In the message text:

Count The number of partitions successfully imported into the database

count2 The total number of partitions from the table

Module: DSPXPDDU

DSPM083I Start Import to DBN=*DBNAME*. from MEM=*member* in DSN=*dataset*. Options=*option*.

Explanation: This is a status message that appears near the beginning of message log that informs users' of DBN, DSN, and MEM options.

In the message text:

DBNAME
The name of the database being imported.

member
The name of the PDS member that will be used as input for the import.

dataset The name of the data set that contains the member.

option The option selected for import processing:

1 Indicates that import processing should stop when there is a problem.

2 Indicates that the import process should continue importing the remaining partitions even when some partitions cannot be imported.

Module: DSPXPDDU

DSPM084W Import successful for partition *name*.

Explanation: The import was successful for the partition indicated by *name*. No errors were found.

Module: DSPXPDDU

DSPM085I Imports start at *date time*.

Explanation: The imports began at the time indicated by *date time*.

Module: DSPXPDDU

DSPM086W Enter a value between 1 and 2.

Explanation: One of the following types of import processing must be specified:

1 Indicates that import processing should stop when there is a problem.

2 Indicates that the import process should continue importing the remaining partitions even when some partitions cannot be imported.

Module: DSPXPDDU

DSPM087W Import process terminated on detection of first error from DBRC.

Explanation: The import process terminated after DBRC detected an error. Terminating the import after detection of an error is an option that was specified by the user.

System Action: The import was terminated.

Programmer Response: Examine the import log for preceding messages that indicated the type of problem encountered. Resolve the error indicated by that message.

Module: DSPXPDDU

DSPM088E Program DSPXPDDU cannot execute outside of ISPF.

Explanation: The DSPXPDDU program cannot be executed outside of ISPF.

System Action: HALDB or DSPXRUN terminates without performing any action.

Programmer Response: Start ISPF and execute the HALDB command. For batch import, use the `ISPSTART` command to start ISPF.

Module: DSPXPDDU

DSPM089W The IMPORT operands specified are invalid or missing.

Explanation: The `IMPORT` command syntax is not correct. Keywords DSN, DBN, or MEM might be missing or values specified for them are not correct or not enclosed in parenthesis. For the OPT keyword, the only valid values are 1 and 2:

1 Indicates that import processing should stop when there is a problem.

2 Indicates that the import process should continue importing the remaining partitions even when some partitions cannot be imported.

System Action: No import is performed.

Programmer Response: Provide proper command syntax for the `IMPORT` command.

Module: DSPXPDDU

DSPM090E A problem exists with DBD data set *name*: *description*.

Explanation: The DBD data set indicated by *name* cannot be processed. The information indicated by *description* is returned by the SYSDSN function of the REXX language.

System Action: The configuration is not saved.

Programmer Response: Try to resolve the problem identified in the message. Use ISPF 3.2 or a similar utility to list data set information and verify that the data set exists and is available.

Module: DSPXPDDU

DSPM091E A problem exists with the RECON data set *name*: *description*.

Explanation: The RECON data set indicated by *name* cannot be processed. This information indicated by *description* is returned by the SYSDSN function of the REXX language.

System Action: The configuration is not saved.

Programmer Response: Try to resolve the problem identified in the message. Use ISPF 3.2 or a similar

utility to list data set information and verify that the data set exists and is available.

Module: DSPXPDDU

DSPM092E File allocation failed for *file* in configuration *cfgname*: *message*

Explanation: An error occurred while issuing the `allocate` command for the file indicated by *file*. See the additional description at the end of the message for more information.

In the message text:

file The file for which the `allocate` command failed.

cfgname The configuration name specified in the panel.

message The message indicates the problem. For example, 'dataset not found'.

System Action: The configuration is not saved.

Programmer Response: Try to resolve the problem identified in the message. Use ISPF 3.2 or a similar utility to list data set information and verify that the data set exists and is available.

Module: DSPXPDDU

DSPM093W An enqueue failed for *dbname*, using RECON data set *recon*. This will prevent you from modifying the database.

Explanation: The database is in use by another person. You can only display partition information and will not be allowed to modify the information.

Module: DSPXPDDU

DSPM094W A modify is not allowed: someone else is using database *dbname*

Explanation: The database is in use by another person. You cannot modify any partitions. Message DSPM093W appeared previously as a warning.

Module: DSPXPDDU

DSPM095I The specified global service group does not exist.

Explanation: The global service group is not currently defined in the RECON data set you are using.

System Action: The HALDB master information will not be saved until a defined global service group is specified.

Programmer Response: Use an existing global service group or create a new one. Use the `list.gsg all` DBRC command to list the defined groups or use the `init.gsg` command to create a new group.

Module: DSPXPDDU

DSPM096I The master database information for *DBNAME* was defined successfully.

Explanation: The HALDB master information for the database you are defining was saved to the RECON data set.

Module: DSPXPDDU

DSPM097W The name of the partition selection routine was cleared. You must set the high key values for each partition before it can be used.

Explanation: The partition selection strings for all partitions were cleared after you removed the partition selection routine name.

System Action: The partition selection strings were cleared.

Programmer Response: Set the high key values again.

Module: DSPXPDDU

DSPM098W The master database for *DBNAME* now uses a partition selection routine. Partitions strings were removed from all partitions.

Explanation: The partition high keys were removed from all partitions after you added a partition selection routine name.

System Action: The partition high keys were cleared.

Programmer Response: Define the partition string values.

Module: DSPXPDDU

DSPM099W One of the partitions is currently authorized. You cannot make a change to the master database information at this time.

Explanation: One of the partitions is currently being used. You cannot modify the HALDB master information until it is available.

Module: DSPXPDDU

DSPM100W The input data set, *data set*, was not found.

Explanation: The input data set does not exist.

System Action: Partitions were not created because the input data set contains the key strings.

Programmer Response: Make sure the specified data set exists and is available.

Module: DSPXPDDU

DSPM101W Open failed for *data set*.

Explanation: The input data set could not be opened.

System Action: Processing is not performed.

Programmer Response: Make sure the input data set exists and that it is not being used.

Module: DSPXPDDU

DSPM102W A member was specified but *data set* is a sequential data set.

Explanation: A member name was specified but the data set is a sequential data set.

System Action: Processing is not performed.

Programmer Response: If the data set is sequential, remove the member name.

Module: DSPXPDDU

DSPM103W *Dataset* has an unsupported record format.

Explanation: The input data set has an unsupported record format. Only fixed-block and variable-block records are supported.

System Action: Processing is not performed.

Programmer Response: Specify a data set that is fixed block or variable blocked.

Module: DSPXPDDU

DSPM104W *Dataset* has an unsupported data set organization.

Explanation: The input data set has an unsupported data set organization. Only partitioned and sequential data sets are supported.

System Action: Processing is not performed.

Programmer Response: Specify a data set that is sequential or partitioned.

Module: DSPXPDDU

DSPM105W Member *member* was not found in *data set*.

Explanation: The member name you specified was not a member of the input data set.

System Action: Processing is not performed.

Programmer Response: Verify that the member name was the correct one and that it exists in the specified data set.

Module: DSPXPDDU

DSPM106W The data set *data set* has records longer than 540.

Explanation: The input data set must have record lengths less than 540 bytes.

System Action: Processing is not performed.

Programmer Response: Use a data set that has record lengths less than or equal to 540.

Module: DSPXPDDU

DSPM107W The input data set, *data set*, contains errors.

Explanation: An error was found in the records of the input data set.

System Action: Processing is not performed.

Programmer Response: Examine the messages in the displayed file for more information about the errors. The errors will be related to the key string values or the syntax.

Module: DSPXPDDU

DSPM108I No changed fields were detected. Use the CANCEL command to leave.

Explanation: No fields were changed on the panel.

System Action: No processing will be performed when you press the Enter key.

Programmer Response: Use the Cancel function key to leave the panel.

Module: DSPXPDDU

DSPM109I Changes to the master database information were successful.

Explanation: The changes to the HALDB master information were saved to the RECON data sets.

Module: DSPXPDDU

DSPM110E File deallocation failed for *ddname: freemsg.*

Explanation: An error occurred when DSPXXALX issued the FREE command for the file identified in ddname.

ddname
The file for which the FREE command failed.

freemsg
The TSO message returned by the FREE command.

Programmer Response: Try to resolve the problem identified in the message. For example, use the TSO LISTA command to see if the IMS RECON or DBDLIB data sets are still allocated. From the ISPF command shell, option 6, issue the TSO FREE command for the IMS and RECON ddnames to free the data sets.

Module: DSPXPDDU

DSPM111I Invalid Partition High key value. The partition high key length of *keylength* is longer than the root key length of *rootlength*.

Explanation: The high key value specified is longer than the length specified in the DBD gen. A longer key is not allowed. In the message text:

keylength
The length of the key that you specified.

rootlength
The maximum key length specified during the DBD generation.

System Action: Processing is not performed.

Programmer Response: Change the high key value so that its length is less than or equal to the maximum allowable length. Keys that are shorter than the allowable key length are padded with X'FF'.

Module: DSPXPDDU

DSPM112W Invalid Partition High key value. Character or hex string does not start/end properly.

Explanation: The syntax of the high key value is incorrect.

System Action: Processing is not performed.

Programmer Response: Change the key string so that it adds or ends correctly. Make sure that the string starts or ends with a quote.

Module: DSPXPDDU

DSPM113W Invalid Partition High key value. Hex string contains characters other than a/f, A/F or 0/9.

Explanation: The hexadecimal string contains non-hexadecimal characters.

System Action: Processing is not performed.

Programmer Response: Make sure that the string only contains valid hexadecimal characters.

Module: DSPXPDDU

DSPM114W Invalid Partition High key value. Null string is found.

Explanation: Blank lines are not allowed.

System Action: Processing is not performed.

Programmer Response: Remove the blanks lines from the input file or add an asterisk in the first column to turn the blank lines into comments.

Module: DSPXPDDU

DSPM115W Invalid Partition High key value. Comments are not allowed.

Explanation: Comments are not allowed in the high key field.

System Action: Processing is not performed.

Programmer Response: Replace the asterisk that is in the first character position with a different character.

Module: DSPXPDDU

DSPM116W Invalid Partition High key value. Length of character key > 256 or hex key > 512.

Explanation: The partition high key value is longer than the supported length of 256.

System Action: Processing is not performed.

Programmer Response: Delete characters from the high key value so that it is no longer too long.

Module: DSPXPDDU

DSPM117W Invalid Partition High key value. Hex string does not contain even numbers of characters.

Explanation: There must be an even number of hexadecimal numbers.

System Action: Processing is not performed.

Programmer Response: Change the hexadecimal string so that there are an even number of hexadecimal digits.

Module: DSPXPDDU

DSPM118W Invalid Partition High key value. x/X for hex string or c/C for character string appear at both start/end of the string.

Explanation: Only one x/X or c/C character is allowed in the string in only one location, at the start or end of the string.

System Action: Processing is not performed.

Programmer Response: Remove the leading or trailing key string identifier (an X or a C). It is usually

easier to remove the trailing identifier.

| **Module:** DSPXPDDU

DSPM119W Recoverable? must be yes if a global service group is specified.

Explanation: The value of the 'recoverable?' field must be YES if a global service group is specified.

System Action: Processing is not performed.

Programmer Response: Change the value of **Recoverable?** from NO to YES or remove the global service group name.

| **Module:** DSPXPDDU

DSPM120E The saved definition does not match the DBDLIB: group count.

Explanation: The HALDB master definition being imported differs from the definition in the DBDLIB member. The data set group count is different.

System Action: The import function does not process the partitions.

Programmer Response: Change the DBD definition to match the database being imported. Use the same data set group count.

| **Module:** DSPXPDDU

DSPM121E The saved definition does not match the DBDLIB: access method.

Explanation: The HALDB master definition being imported differs from the definition in the DBDLIB member. The access method is different.

System Action: The import function does not process the partitions.

Programmer Response: Change the DBD definition to match the database being imported. Use the same access method.

| **Module:** DSPXPDDU

DSPM122E The saved definition does not match the DBDLIB: database name.

Explanation: The HALDB master definition being imported differs from the definition in the DBDLIB member. The database name is different.

System Action: The import function does not process the partitions.

Programmer Response: Change the DBD definition to match the database being imported. Use the same database name.

| **Module:** DSPXPDDU

DSPM123E The function *'function'* is not supported.

Explanation: A batch function other than IMPORT was specified. No other functions are allowed.

System Action: No processing is performed.

Programmer Response: Make sure that ″import″ is spelled correctly and is the first word following the `DSPXRUN` command.

| **Module:** DSPXPDDU

DSPM124W The database cannot be deleted. A partition is currently authorized.

Explanation: A partition is currently being used by IMS or another utility and cannot be deleted.

Programmer Response: Make sure the database and all of its partitions are stopped.

| **Module:** DSPXPDDU

DSPM125W The partition is currently authorized and cannot be deleted.

Explanation: A partition is currently being used by IMS or another utility and cannot be deleted.

Programmer Response: Make sure the partition is stopped.

| **Module:** DSPXPDDU

DSPM126W IMS configurations need to be saved to the ISPTABL file, but it is not allocated.

Explanation: An ISPTABL data set must be allocated before you can use the IMS configurations panels. The same data set must also be in your ISPTLIB data set.

System Action: Processing is not performed.

Programmer Response: Allocate the ISPTABL data set outside of ISPF and allocate the same data set in your ISPTLIB data set.

| **Module:** DSPXPDDU

DSPM127W Changes to this partition affect another partition that is in use.

Explanation: A change being made to a partition affects another partition that is currently in use. All affected partitions must be unauthorized. This message might display when a partition will be added, changed, or deleted.

System Action: Processing is not performed.

Programmer Response: Make sure that the affected partition is stopped. Keep in mind that the partition that is still in use is not the partition that was being modified.

| **Module:** DSPXPDDU

DSPM128W The data set prefix name cannot contain quote characters.

Explanation: The data set name prefix is not a data set; it is the prefix for a name that will be dynamically built. The actual name will consist of this prefix, the partition ID, and the type of data set. Because the data set prefix is not a data set name, it cannot be fully qualified; that is, it cannot contain quotes.

System Action: Processing is not performed.

Programmer Response: Remove the quote characters from the data set name prefix and press the Enter key to continue.

Module: DSPXPDDU

DSPM130W The name is missing or invalid.

Explanation: The field requires a valid name. One of the following is true:

- The name is missing.
- The name contains invalid characters.

System Action: Processing is not performed.

Programmer Response: Ensure the name is spelled correctly and follows normal name syntax. Correct the problem and press the Enter key to continue processing.

Module: DSPXPDDU

DSPM131W The value contains imbedded blanks.

Explanation: The value should be appear as a single word or number, with no blank characters in the middle.

System Action: The panel is redisplayed.

Programmer Response: Ensure the name is spelled correctly and follows normal name syntax. Correct the problem and press the Enter key to continue processing.

Module: DSPXPDDU

DSPM132W The name must be an alphanumeric value.

Explanation: The name entered contains characters that cannot be used in a name.

System Action: The panel is redisplayed.

Programmer Response: Ensure the name is spelled correctly and follows normal name syntax. Correct the problem and press Enter to continue processing.

Module: DSPXPDDU

DSPM133W The first character must be alphabetic

Explanation: The first character of a name must be an alphabetic or national character.

System Action: The panel is redisplayed.

Programmer Response: Ensure the name is spelled correctly and follows normal name syntax. Correct the problem and press Enter to continue processing.

Module: DSPXPDDU

DSPM134W The value is not correct, type = *code*

Explanation: The field failed validity checking, however, an internal error prevents a specific message from being displayed. The *code* value indicates the type of the error. Generally, the value has meaning only to IBM service representatives.

System Action: The panel is redisplayed.

Programmer Response: If the problem persists, contact the IBM Support Center and report the error and type value. The value only has meaning to IBM personnel.

Module: DSPXPDDU

DSPM135W The only partition status value you can type is 'DISABLE'.

Explanation: The partition status field is normally blank. The only value you can type at this time is `DISABLE`. There are no abbreviations.

System Action: The panel is redisplayed.

Programmer Response: Remove the information from the field and press the Enter key. If you want to disable the partition, type `DISABLE` and press the Enter key.

Module: DSPXPDDU

DSPM136W Enter a numeric value greater than zero.

Explanation: Either a blank field was entered or a zero was typed in a field expecting a numeric value.

System Action: The panel is redisplayed.

Programmer Response: Type a numeric value and press the Enter key to continue processing.

Module: DSPXPDDU

DSPM137W Set the partition status to 'ENABLE' or press the Cancel key.

Explanation: The partition status is currently 'disabled'. The only value you can enter on this panel is `ENABLE`. No abbreviations are accepted.

System Action: The panel is redisplayed.

Programmer Response: If you want to enable the partition, type ENABLE and press the Enter key. If you do not want to enable the partition, press the Cancel key.

Module: DSPXPDDU

DSPM138I The partition high key contains non-display characters.

Explanation: The partition high key or selection string contains non-display characters. The characters consist of hexadecimal number combinations that do not represent valid keyboard characters.

The INFO line contains the high key value in a different format. To use that line, delete the first data line and type 'MD' in the line command column, to the left of the INFO line.

System Action: The ISPF editor displays the high key in HEX ON mode.

Programmer Response: You can overtype displayed characters in the data line, or type hexadecimal values in the hexadecimal line.

To use the INFO line, delete the first data line and type 'MD' in the line command column, to the left of the INFO line. Edit the hexadecimal string as required. Press F3 to save, or use the CANCEL command to leave without changing the value.

Module: DSPXPDDU

DSPM139I Update in HEX mode, or use MD command to edit the 'info' line.

Explanation: Edit the high key value using the ISPF editor commands valid in HEX ON mode. You can type over displayed characters or type hexadecimal values in the lines showing the hexadecimal representation of the high key value.

The INFO line contains the high key value in a different format. To use that line, delete the first data line and type 'MD' in the line command column, to the left of the INFO line.

System Action: The editor shows the high key in HEX ON mode.

Programmer Response: You can overtype displayed characters in the data line, or type hexadecimal values in the hexadecimal line.

To use the INFO line, delete the first data line and type 'MD' in the line command column, to the left of the INFO line. Edit the hexadecimal string as required. Press F3 to save, or use the CANCEL command to leave without changing the value.

Module: DSPXPDDU

DSPM140I The partition list has been refreshed.

Explanation: The user used the action bar to select 'View' and 'Refresh'.

System Action: The partition list was retrieved from the RECON data sets and redisplayed.

Programmer Response: No response is required.

Module: DSPXPDDU

DSPM141W This application will not work properly with keylists turned off.

Explanation: The KEYLIST OFF command was used for the global ISPF function key settings. It is recommended that the keylist setting be reset by using the KEYLIST ON command in the ISPF command line.

Some panels have function keys set to unique commands and if keylists are turned off, the function requested may not work properly.

System Action: The Partition Definition Utility will continue to operate with KEYLIST OFF setting.

Programmer Response: To use the function keys defined for this application, type the KEYLIST ON command in the command line and press the Enter key.

Module: DSPXPDDU

DSPM142I Start export to MEM=*dspxmem in* DSN=*dspxdsn from* DBN=DBNAME.

Explanation: The user requested the export of the database.

System Action: The information about the database is saved in the data set specified.

Programmer Response: No response is required.

Module: DSPXPDDU

DSPM143I The export file contains partition *partname*.

Explanation: The user requested the export of the database. The partition names are listed as an aid if there are subsequent problems.

System Action: The information about the database is saved in the data set specified. While each partition is listed individually, the save is done for the entire list at one time.

Programmer Response: No response is required.

Module: DSPXPDDU

Chapter 12. DXR (IRLM) Messages

This section describes messages for the IMS internal resource lock manager (IRLM) component. The purpose of the IRLM component is to control resource sharing between multiple IMS subsystems executing within one or two z/OS systems.

In this section:

- "Introduction"
- "DXR Messages" on page 428
- "IRLM Request Return and Reason Codes" on page 446

Introduction

IRLM messages have a prefix of DXR.

The messages are presented in numeric order and have the form DXR1xxA, where the letter A represents a coded suffix. The meaning of the suffix varies depending upon the content of the message. If the suffix *A, I, or E* is used, the following applies:

- *A* means that *action* is required of the user before processing can continue
- *I* means that the message is *informational* only
- *E* means that the message is an error condition that might require action

All operator messages contain the IRLM subsystem name, `irlmnm`, that issued the message. A connected IRLM is identified by `irlmx`, which is the concatenation of the IRLMNM (four bytes) followed by the IRLMID (one-to-three bytes). These values were specified as EXEC parameters when that IRLM was started. For example:

- If the IRLMNM was "KRLM" and the IRLMID was "12", the irlmx would be "KRLM012"
- If the IRLMNM was "LRLM" and the IRLMID was "000", the irlmx would be "LRLM000"

Figure 1 illustrates the format of the irlmx (IRLMNM concatenated with IRLMID).

Figure 1. Format of irlmx

In the following message descriptions, 'irlm' or 'irlmx' designates the z/OS subsystem name assigned to IRLM.

For each message, the following accompanying information is provided when applicable:

Explanation: What the message means; why it appears; what caused it; what its variable entry fields are.

System Action: What is happening as a result of the condition causing the message; whether the system is waiting for responses.

Programmer or Operator Response, or both: If a response is necessary, who performs it; what the pertinent responses are, and their effect on the system or program. If this information is not shown, it does not apply.

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Problem Determination: If the problem recurs or is persistent to the point that system efficiency suffers, what actions can be performed to obtain adequate data for trained hardware or programming support personnel to diagnose the problem. If this information is not shown, it does not apply.

Problem Determination refers to a list of problem determination actions specified in Appendix A, “IMS Problem Determination,” on page 553. These common action tables do not teach diagnostic techniques, but instruct the operator or system programmer about what to do when problems recur. The problem determination actions are aids to the identification of hardware or programming problems and ensure that qualified support personnel will have the essential programming information available to diagnose and correct the difficulty.

DXR Messages

DXR100I *irlmx* **STOR STATS PC:** *pc* **MAXCSA:** *csa* **CSA USE: ACNT:** *acnt* **AHWM:** *ahwm* **CUR:** *cur* **HWM:** *hwm* **ABOVE 16M:** *segabovestorabove* **BELOW 16M:** *segbelowstorbelow*

:

CLASS	TYPE	SEGS	MEM	TYPE
class	*type*	*segs*	*mem*	*type*

SEGS	MEM	TYPE	SEGS	MEM
segs	*mem*	*type*	*segs*	*mem*

Explanation: This message is issued in response to the following command:

```
F irlmproc,STATUS,STOR
```

A brief summary of selected storage usage is displayed where:

acnt Is the current CSA + ECSA usage for lock control structures. This storage is called "accountable" because it is accountable against the MAXCSA value. Its value is specified as either *xxxK* for kilobytes or *xxxM* for megabytes. When PC=YES, this value will be 0K (zero K).

ahwm Is the High Water Mark or greatest amount of CSA + ECSA allocated by IRLM during this initialization period for lock control structures. Its value is specified as either *xxxK* for kilobytes or *xxxM* for megabytes.

class Specifies the category of storage. These are: ″ACCNT″, ″PROC″, and ″MISC″. ″ACCNT″ describes the storage allocated to IRLM lock control blocks. ″PROC″ describes the storage allocated to IRLM structures used for IRLM processing (including requests). This storage includes CSA, ECSA, and IRLM private storage. ″MISC″ describes the storage allocated for the rest of IRLM’s needs. This includes trace buffers and other diagnostic structures. This storage includes CSA, ECSA, and IRLM private storage.

csa The value displayed when the PC parameter is NO. This represents the value of MAXCSA that was specified in the *irlmproc* as *xxxM* for megabytes or the value last entered with the F *irlmproc*,SET,CSA= command.

cur Is the current CSA + ECSA usage. Its value is specified as either *xxxK* for kilobytes or *xxxM* for megabytes.

hash The number of Lock Hash entries in units of 1,048,576 available in the Coupling Facility the last time this IRLM was connected to the group. If *hash* is less than 1 unit, the value will be zero.

This field is valid only for SCOPE=GLOBAL or NODISCON.

hwm Is the High Water Mark or greatest amount of CSA + ECSA allocated by IRLM during this initialization period. Its value is specified as either *xxxK* for kilobytes or *xxxM* for megabytes.

lte The number of lock table entries in units of 1048576, available in the coupling facility the last time this IRLM was connected to the group. If *lte* is less than one unit, the value is zero.

This field is valid only for SCOPE=GLOBAL or NODISCON.

mem The storage specified as either *xxxK* for kilobytes or *xxxM* for megabytes.

N/A The value displayed when the PC parameter is YES.

pc The parameter as specified in the *irlmproc*. Its value is either YES or NO.

segs The number of storage segments allocated

rle The number of record list entries available in the coupling facility the last time this IRLM was connected to the group.

This field is valid only for SCOPE=GLOBAL or NODISCON.

rleuse The number of *rle*s that were in use in the coupling facility at the time the `MODIFY` command is issued. If the IRLM is DISCONNECTED from the CF, this number represents those in use when last updated prior to DISCONNECT.

This field is valid only for SCOPE=GLOBAL or NODISCON.

segabove The number of IRLM control block segments above 16M. Its value is the number of control block segments.

segbelow The number of IRLM control block segments below 16M. Its value is the number of control block segments.

storabove The storage allocated to the segments in *segabove*. Its value is the storage allocation specified as either *xxxK* for kilobytes or *xxxM* for megabytes.

storbelow The storage allocated to the segments in *segbelow*. Its value is the storage allocation specified as either *xxxK* for kilobytes or *xxxM* for megabytes.

type Specifies the subcategory for CLASS. For example, T-1 is storage for resource block structures; T-2 is storage for resource request structures, and T-3 is storage for requestor structures. The storage for types T-1, T-2, and T-3 is allocated from ECSA when PC=NO or IRLM private storage when PC=YES.

Shown below is sample output when the parameter PC = NO:

```
DXR100I IR21240 STOR STATS
PC: NO   MAXCSA:   3M  LTE:    16M  RLE:  231410  RLEUSE:      20
CSA USE: ACNT:   132K  AHWM:   132K  CUR:   664K  HWM:   665K
ABOVE 16M:    15    659K     BELOW 16M:     3      5K
CLASS   TYPE  SEGS     MEM   TYPE  SEGS     MEM   TYPE  SEGS     MEM
ACCNT   T-1      1     64K   T-2      1     64K   T-3      1      4K
PROC    WRK      3     18K   SRB      1      1K   OTH      1      1K
MISC    VAR      8    481K   N-V      6     22K   FIX      1     24K
    DXR100I End of display
```

Shown below is sample output when the parameter PC = YES:

```
DXR100I JR21212 STOR STATS
PC: YES  MAXCSA: N/A   LTE:    16M  RLE:  231410  RLEUSE:      20
CSA USE: ACNT:     0K  AHWM:     0K  CUR:  1702K  HWM:  1702K
ABOVE 16M:    32   1697K     BELOW 16M:     3      5K
CLASS   TYPE  SEGS     MEM   TYPE  SEGS     MEM   TYPE  SEGS     MEM
ACCNT   T-1      1     64K   T-2      1     64K   T-3      1      4K
PROC    WRK      4     24K   SRB      1      1K   OTH      1      1K
MISC    VAR     27   1837K   N-V      6     22K   FIX      1     24K
    DXR100I End of display
```

System Action: Processing continues normally.

DXR101I *irlmx* **STATUS SCOPE=***nnnnnn*
SUBSYSTEMS IDENTIFIED

:

NAME STATUS UNITS HELD WAITING RET_LKS
ssname zzz wun reh rew rtlks

Explanation: This message is issued in response to the following command:

```
F irlmproc,STATUS
```

A list of DBMSs identified to the IRLM is displayed. Work unit and lock information is displayed for each DBMS.

The message variables are:

nnnnnn One of the following:

LOCAL
SCOPE=LOCAL was specified as an EXEC parameter when the IRLM was started.

GLOBAL
SCOPE=GLOBAL was specified in the IRLMPROC and the IRLM is connected to a data sharing group.

DISCON
SCOPE=GLOBAL or SCOPE=NODISCON was specified in the IRLMPROC and the IRLM is not connected to a data sharing group.

NoDISC
SCOPE=NODISCON was specified in the IRLMPROC and the IRLM is connected to a data sharing group.

GINIT SCOPE=GLOBAL was specified in the IRLMPROC and the IRLM is joining a data sharing group.

GTERM
SCOPE=GLOBAL was specified in the IRLMPROC and the IRLM is terminating from a data sharing group.

ssname
An eight-character DBMS name.

zzz One of the following:

UP The DBMS is active.

DOWN The DBMS failed.

UP-RO The DBMS subsystem is active and is

currently identified to the IRLM as a 'read-only' subsystem.

UP-NS The DBMS subsystem is active and is currently identified to the IRLM as a 'no-share' subsystem.

CLEANUP
The IRLM drove the DBMS STATUS exit, indicating a failure condition, and is waiting for that DBMS to respond with a PURGE, indicating cleanup is complete.

SFAIL The IRLM to which the DBMS is identified disconnected from the data sharing group. The modify locks for all the subsystems on that IRLM were retained by IRLM. All DBMSs that are identified to IRLMs disconnected from a data sharing group are listed as SFAIL by the surviving IRLMs.

wun The number of work units under the DBMS that are holding or waiting for a lock. No work units exist for a failed DBMS. The field is set to '...' for a failed DBMS.

reh The number of resources locked by the DBMS.

rew The number of waiting lock requests. No waiting requests are permitted for a failed DBMS. The field is set to '...' for a failed DBMS.

rtlks The number of retained locks held by a subsystem that failed or was running on an IRLM that failed. In most cases, retained locks are purged when a DBMS reidentifies to IRLM; therefore the number is zero for active DBMSs. However, it is possible for a DBMS to hold both active and retained locks if it is recovering from a previous failure.

If no DBMSs are identified to this IRLM, the line beginning with *ssname* is replaced with NO INFORMATION AVAILABLE.

System Action: Processing continues normally.

DXR102I *irlmx* **STATUS SUBSYSTEMS IDENTIFIED**

:

NAME *ssname*
STATUS *zzz*
RET-LKS *rtlks*
IRLMID *id*
IRLM_NAME *iname*
IRLM_LEVL *ilevel*

Explanation: This message is issued in response to the following commands:

```
F irlmproc,STATUS,ALLD
F irlmproc,STATUS,irlmx
```

where *irlmx* is the IRLMX + IRLMID fields as specified in the IRLMPROC whose status is requested.

A list of DBMSs identified to the IRLMs in the data sharing group is displayed.

The message variables are:

ssname
An 8-character DBMS name.

zzz One of the following:

UP The DBMS is active.

DOWN The DBMS failed.

UP-RO The DBMS subsystem is active and is currently identified to the IRLM as a 'read-only' subsystem.

UP-NS The DBMS subsystem is active and is currently identified to the IRLM as a 'no-share' subsystem.

CLEANUP
The IRLM drove the DBMS STATUS exit, indicating a failure condition, and is waiting for that DBMS to respond with a PURGE, indicating cleanup is complete.

SFAIL The IRLM to which the DBMS is identified was disconnected from the data sharing group. The modify locks for all the DBMS subsystems on that IRLM were retained by IRLM. All DBMSs that are identified to IRLMs disconnected from a data sharing group are listed as SFAIL by the surviving IRLMs.

rtlks The number of retained locks held by a subsystem that failed or was running on an IRLM that failed. In most cases, retained locks are purged when a DBMS reidentifies to IRLM; therefore, the number is zero for active DBMSs. However, it is possible for a DBMS to hold both active and retained locks if it is recovering from a previous failure.

id The ID of the IRLM to which the DBMS is identified.

iname The name of the IRLM to which the DBMS is identified.

If no DBMSs are identified to any IRLM or to the IRLM specified, or the IRLM specified is not known, the line beginning with *ssname* is replaced with NO INFORMATION AVAILABLE.

ilevel The irlm function level requested by the DBMS at IDENTIFY. The actual IRLM function level might be greater than this value, but will never be less. If the DBMS failed and its IRLM is the last IRLM to disconnect from the group, the value will be zero when displayed by any peer member that joins until the failed DBMS is restarted.

System Action: Processing continues normally.

DXR103I *irlmx* **STATUS IRLMS PARTICIPATING IN DATA SHARING GROUP FUNCTION LEVEL** *glvm*

:

IRLM-NAME	*iname*
IRLMID	*id*
STATUS	*zzz*
LEVEL	*lv*
SERVICE	*s*
MIN_LEVEL	*mlv*
MIN_SERVICE	*ms*

Explanation: This message displays the active IRLMs in response to the following command:

```
F irlmproc,STATUS,ALLI
```

A list of IRLMs in the group that are actively data sharing is displayed. If not data sharing, the single IRLM is displayed.

glv The IRLM function level in use by all the IRLM(s) in the data sharing group.

m A decimal number such as 1, 2, and so on.

When more than 10 lines are required in response to a status command, multiple messages are issued with *m* incremented by one in each successive message.

iname A 4-character IRLM name.

id The ID of the IRLM.

zzz One of the following:

UP The IRLM is active.

DOWN The IRLM failed.

lv The current IRLM function level.

s The IRLM service or release that corresponds to the function level given in *lv*.

mlv The minimum IRLM function level this IRLM can coexist with.

ms The IRLM service or release that corresponds to the function level given in *mlv*

System Action: Processing continues normally.

DXR104I *irlmx* **MAINTENANCE LEVELS**

Explanation: This display is produced by the `MODIFY irlmproc,STATUS,MAINT` command. Maintenance levels of all IRLM load modules except DXRRL183, DXRRLFTB, DXRRLM50, and DXRRL186 are displayed to the console in two column format, showing the most recent APAR level and the compile date applied to each csect.

System Action: IRLM processing continues normally.

System Operator Response: Review the maintenance level for any suspected module error or as requested by the IBM Support Center.

System Programmer Response: None.

DXR105E *irlmx* **STOP COMMAND REJECTED. AN IDENTIFIED SUBSYSTEM IS STILL ACTIVE**

Explanation: A `STOP irlmproc` command was entered, but the IRLM still has active DBMSs identified.

System Action: The command is not processed, but IRLM processing continues normally.

System Operator Response: Reenter the STOP command after all active DBMSs have terminated, or terminate the IRLM abnormally with the `F irlmproc,ABEND` command.

DXR106E *irlmx* **INVALID MODIFY COMMAND PARAMETER SPECIFIED**

Explanation: A MODIFY command specified the procedure name of this IRLM, but the command either contained parameter values not supported by the IRLM or did not contain a required parameter.

System Action: The command is not processed, but IRLM processing continues normally.

System Operator Response: Reenter the MODIFY command with the correct parameters.

DXR107E *irlmx* **STORAGE NOT AVAILABLE TO PROCESS THIS COMMAND**

Explanation: The IRLM cannot obtain sufficient internal working storage to process the command.

System Action: The command is not processed, but IRLM processing continues normally.

System Operator Response: Inform the system programmer. Reenter the command after storage is available to process the command.

System Programmer Response: Increase the region size specified on the IRLM startup procedure.

DXR108I *irlmx* **PURGE,** *nnnnnnnn* **COMMAND FAILED** *yyyyyyyy*

Explanation: A PURGE command specified either a name of an active DBMS or a name that is not known to this IRLM.

nnnnnnnn
The *dbmsname* specified on the `PURGE,dbmsname` command.

yyyyyyyy
The reason the purge command failed:

PURGE IN PROGRESS:
Either another PURGE command is being processed, or the IRLM is in the process of cleaning up from the disconnection of another group member.

NAME NOT FOUND OR ACTIVE:
The DBMS name specified cannot be found, or that DBMS is identified as an active subsystem and cannot be purged by the PURGE command.

System Action: The command failed, but IRLM processing continues normally.

System Operator Response: Reenter the PURGE command with the correct parameters.

DXR109I *irlmx* **PURGE COMMAND COMPLETED FOR** *nnnnnnnn*

Explanation: A PURGE command completed successfully.

nnnnnnnn
The DBMS name specified on the `PURGE,dbmsname.` command

System Action: Processing continues normally.

DXR110I *irlmx* **STOP COMMAND ACCEPTED**

Explanation: The IRLM accepted the STOP command and is beginning the normal shutdown process.

System Action: The IRLM is performing shutdown processing. The IRLM subtasks are being quiesced and detached. If the IRLM is actively part of a data sharing group, then the other IRLMs are informed when this IRLM leaves the data sharing group.

System Operator Response: None is required.

DXR116E *irlmx* **INITIALIZATION FAILED, CODE=***xx* **DETECTED BY** *zzzzzzzz*

Explanation: The IRLM was unable to complete initialization because of error code *xx*. The name of the module that detected the failure is *zzzzzzzz*.

The values of *xx* are:

01 Unable to allocate global storage.

02 Unable to allocate local storage.

03 The IRLMID was missing or invalid. IRLMID must be specified as a 1 to 3-digit number from 0 through 255. The IRLMID must be unique among all IRLMs belonging to the same data sharing group (having the same GROUP parameter). This code can also be returned if you are using a printable character (such as 'D') for the IRLM identifier. Because of the way z/OS interprets quotes, a printable character must be surrounded by enough single quotes for IRLM to determine that this is a printable character. For the IRLMID parameter in the start-up procedure, there must be seven quotes on either side of the character (''''''D''''''). If you are specifying the IRLMID on the EXEC statement, there must be three quotes on either side ('''D''').

05 The DEADLOK parameter was missing or invalid. This parameter must be specified as *iiii,kkkk*, where *iiii* and *kkkk* are 1 to 4-digit numbers from 1 through 9999.

06 A z/OS subsystem SSCVT containing the name specified by the IRLMNM parameter does not exist. IRLM was not properly registered with z/OS to use the subsystem interface.

07 Error in module zzzzzzzz initialization.

08 Error loading IRLM modules.

09 IRLM was already started.

10 The SCOPE parameter was missing or invalid. Either LOCAL, GLOBAL, or NODISCON must be specified.

11 The MAXCSA parameter was missing or invalid. This parameter must be specified as a 1 or 3-digit number from 0 to 999.

12 The IRLMNM parameter was missing or a length greater than 4 was specified.

13 The SETDIE for the initial deadlock time interval failed.

14 The PC parameter was specified incorrectly. Either YES or NO must be specified.

15 The operating system on which IRLM is attempting to start is not MVS/XA™ or higher.

16 The MAXUSERS parameter was invalid.

17 Invalid group name. A 1 to 8 character group name must be specified if running SCOPE=GLOBAL.

18 Invalid lock table name. The lock table name must be the same as the one defined in the z/OS locking policy, or it must not be specified.

19 The CTRACE DELETE HEAD-level trace failed.

20 The CTRACE DEFINE HEAD-level trace failed.

21 The CTRACE DEFINE SUB trace failed.

22 More than one displayable character was specified for the IRLMID parameter.

23 An invalid value for the TRACE parameter is specified. The only valid values are YES and NO.

24 The value specified for HASH= is not in the valid range of 0 - 1024, or it is not an even power of two (for example, 2, 4, 8, 16, and so on).

System Action: IRLM user abend 2018 is issued.

System Operator Response: Notify the system programmer.

System Programmer Response: Take the following action based on the code:

01 Make global storage available to IRLM. Analyze the dump for more information.

02 Increase the region size on the IRLM start-up procedure. Analyze the dump for more information.

03 Correct the IRLMID parameter on the IRLM start-up procedure.

05 Correct the DEADLOK parameter on the IRLM start-up procedure.

06 Verify that the IRLM start-up procedure specifies the desired IRLM name. If IRLMNM specifies the desired name, verify that a z/OS subsystem with that name is defined.

07 Analyze the dump to determine the problem.

08 Analyze the dump to determine the problem.

09 Verify that the IRLM start-up procedure specifies the desired IRLM name.

10 Correct the SCOPE parameter on the IRLM start-up procedure.

11 Correct the MAXCSA parameter on the IRLM start-up procedure.

12 Correct the IRLMNM parameter on the IRLM start-up procedure.

13 Analyze the dump to determine the problem.

14 Correct the IRLM PC parameter.

15 IRLM must be run on an MVS/XA or higher system.

16 Correct the MAXUSERS parameter.

17 Correct the XCF group name parameter in the IRLM start-up procedure.

18 Correct the lock table name parameter in the IRLM start-up procedure.

19 Analyze the dump to see what is wrong with CTRACE.

20 Analyze the dump to see what is wrong with CTRACE.

21 Analyze the dump to see what is wrong with CTRACE.

22 Correct the value for the IRLMID parameter.

23 Correct the value for the TRACE parameter.

24 Correct the HASH= value and reissue the `START` command.

For codes 1, 2, 6, 7, 8, 13, 18, 19, and 20, an SDUMP is also taken. The IRLM discontinued its initialization processing.

DXR117I *irlmx* **INITIALIZATION COMPLETE**

Explanation: The IRLM successfully completed initialization and is available for use. If SCOPE=GLOBAL is specified, message DXR132I is issued when the IRLM connects to the global environment and is capable of inter-system data sharing.

System Action: The IRLM is processing normally.

DXR121I *irlmx* **END-OF-TASK CLEANUP SUCCESSFUL — HI-CSA** *xxxK* **or** *xxxM*-**HI-ACCT-CSA**

Explanation: The IRLM end-of-task routine released all of the z/OS common storage that was in use by the terminating IRLM except for storage required for EOT/EOM processing. The HI-CSA is the highest amount of CSA + ECSA allocated to the IRLM during this initialization. The HI-ACCT-CSA is the highest amount of CSA +ECSA allocated to the IRLM for lock control blocks (MAXCSA applies only to this value). The value for HI-CSA or HI-ACCT-CSA is displayed as either *xxxK* for kilobytes or *xxxM* for megabytes.

System Action: The IRLM terminated processing.

System Operator Response: None is required. Enter the `S irlmproc` command to restart the IRLM.

DXR122E *irlmx* **ABEND UNDER IRLM TCB/SRB IN MODULE** *xxxxxxxx* **ABEND CODE** *zzzz*

Explanation: The IRLM experienced an unrecoverable programming error while processing under an IRLM execution unit. Global sharing with the IRLM issuing the message is inhibited.

xxxxxxxx
The name of the module that detected the failure.

zzzz The abend code associated with the failure.

System Action: The IRLM is performing abnormal termination processing. An MVS SYS1.LOGREC entry and an SDUMP were requested. An abend is issued to terminate the IRLM job-step task.

System Operator Response: Notify the system programmer. Ensure that the SYS1.DUMPxx data set containing the SDUMP is not overwritten before the dump is printed. Follow IRLM restart procedures.

System Programmer Response: Use the IPCS service aid to analyze the dump to determine the cause of the failure.

DXR123E *irlmx* **ABEND UNDER DBMS TCB/SRB IN MODULE** *xxxxxxxx* **ABEND CODE=***zzzz* **ERROR ID=***wwww*

Explanation: The IRLM experienced an irrecoverable programming error while processing a request executing under a DBMS execution unit. Global sharing with the IRLM issuing the message is inhibited. An MVS SYS1.LOGREC entry and an SDUMP were requested.

xxxxxxxx
The name of the module that detected the failure

zzzz The abend code associated with the failure

wwww The error ID or dump sequence number for the associated LOGREC entry.

System Action: The IRLM is performing abnormal termination processing.

System Operator Response: Notify the system programmer. Ensure the SYS1.DUMPxx data set containing the SDUMP is not overwritten before the dump is printed. Follow IRLM restart procedures.

System Programmer Response: Use the IPCS service aid to analyze the dump to determine the cause of the failure.

DXR124E *irlmx* **ABENDED VIA MODIFY COMMAND**

Explanation: The IRLM terminated as a result of receiving an `F irlmproc,ABEND` command. Global sharing with the IRLM issuing the message is inhibited. An MVS SYS1.LOGREC entry was requested. If the NODUMP parameter was omitted from the `MODIFY` command, an SDUMP was requested.

System Action: The IRLM is performing abnormal termination processing.

System Operator Response: If an SDUMP was taken, ensure that the SYS1.DUMPxx data set containing the SDUMP is not overwritten before the dump is printed. Notify the system programmer.

System Programmer Response: Use the IPCS service aid to analyze the dump to determine the cause of the failure.

DXR131I *irlmx* **OUT OF** *xxxx* **STORAGE DETECTED DURING DEADLOCK. DEADLOCK PROCESS DELAYED.**

Explanation: IRLM detected an out-of-storage condition during deadlock detection of resolution processing. Rather than abending the IRLM, the deadlock process for this deadlock detection interval was ended before completely detecting or resolving deadlocks. If this condition is permitted to persist, undetected deadlocks might occur.

xxxx The type of storage IRLM was attempting to get when the out-of-storage condition was detected. It is either ECSA for extended CSA, or PRIVATE for IRLM private storage.

System Action: The IRLM cleans up deadlock data structures before completing deadlock detection or resolution. Deadlock detection or resolution is attempted in one local deadlock cycle as specified on the IRLM startup procedure parameter.

System Operator Response: Stop and restart the IRLM specifying a larger region size on the IRLM startup procedure. IRLM need not be stopped immediately and can remain up indefinitely if the volume of requests to the IRLM is reduced by limiting DBMS activity.

DXR132I *irlmx* **SUCCESSFULLY JOINED THE DATA SHARING GROUP WITH** *yyyyM* **LOCK TABLE ENTRIES AND** *nnnnnnnn* **RECORD LIST ENTRIES**

Explanation: The IRLM successfully connected to the data sharing group. This includes a successful join to the XCF group and a successful connection to the lock structure. (XCF is the cross-system coupling facility of z/OS.) The IRLM can now participate in inter-system data sharing.

In the message text:

yyyy The number of lock table entries in units of 1,048,576. If the number of LTEs is less than one unit, *yyyy* is zero. The first IRLM to CONNECT to the group, causing structure allocation, dictates these values for the group.

nnnnnnnn The number of record list entries available in the coupling facility.

System Action: The IRLM continues operation.

System Operator Response: None is required.

DXR133I *irlmx* **TIMEOUT DURING GLOBAL INITIALIZATION WAITING FOR** *irlmy*

Explanation: A time-out occurred while the IRLM was attempting global initialization. This problem usually occurs because incorrect lock structure or XCF group names were specified on the LOCKTABL and GROUP parameters. (XCF is the cross-system coupling facility component of z/OS.) However, anything that delays global initialization for at least 30 seconds causes this message to be issued.

In the message text, *irlmy* can be the IRLMNM + IRLMID values for an existing peer member or NOEVENT.

System Action: IRLM continues to issue this message until one of the following occurs:

- Global initialization completes.
- The system programmer takes some action to abend the IRLM.
- IRLM abends with U2025 after an internal limit of time-out messages is reached.

System Operator Response: Notify the system programmer.

System Programmer Response: Investigate what is delaying initialization based on the value of *irlmy*. If *irlmy* is the name of a peer IRLM, then that member is not sending the required XCF messages to the new member joining. This situation might be due to XCF messaging problems, processing problems such as DXR167E, or lack of XCF EVENTs. If the new joining member had a prior failure, make sure that each existing member issued the DXR137I recovery message. If *irlmy* is NOEVENT, then the problem is probably restricted to the new joining member, and only a dump of this member and XCFAS is likely to be needed.

Check the lock structure and XCF group names to ensure that the names specified for this IRLM match the names for all other group members. You can use XCF commands to display the current members in the XCF group to see if this IRLM joined successfully. If necessary, take a dump to assist in failure analysis.

Since this message can be issued as the result of missing interaction with other members, you might need dumps of peer sysplex IRLM members, along with XCFAS. If *irlmy* is a peer IRLM, then take dumps of that member and the joining member. If you want to get the new member to successfully join, you must terminate any peer member whose name appears for *irlmy* before attempting to start the new member.

DXR134E *irlmx* **JOIN XCF GROUP** *wwwwwwww* **FAILED FOR GLOBAL INITIALIZATION, RETURN=***xx***, REASON=***yyyy*

Explanation: The IRLM cannot successfully join the XCF group. (XCF is the cross-system coupling facility component of z/OS.)

wwwwwwww
The IRLMGRP name specified on the IRLM startup procedure

System Action: IRLM does not connect to the data sharing group. The identify request for the DBMS attempting to identify is rejected.

System Operator Response: Notify the system programmer.

System Programmer Response: Try to determine why the IRLM cannot join. See the IXCJOIN section of *z/OS MVS Programming: Sysplex Services Reference* for an explanation of the return and reason codes. If the reason for the connection failure was corrected, restart the IRLM and reidentify the DBMS to it.

DXR135E *irlmx* **CONNECT TO LOCK TABLE** *wwwwwwww* **FAILED FOR GLOBAL INITIALIZATION, RETURN=***xx***, REASON=***yyyy*

Explanation: The IRLM cannot successfully connect to the lock table.

wwwwwwww
The lock table name passed at identify time or the LOCKTAB name specified on the IRLM startup procedure

System Action: IRLM does not connect to the data sharing group. The identify request for the DBMS attempting to identify is rejected.

System Operator Response: Notify the system programmer.

System Programmer Response: Try to determine why the IRLM cannot connect. See the IXLCONN section of *z/OS MVS Programming: Sysplex Services Reference* for an explanation of the return and reason codes. If the reason for the connection failure was corrected, restart the IRLM and reidentify the DBMS to it.

DXR136I *irlmx* **HAS DISCONNECTED FROM THE DATA SHARING GROUP**

Explanation: The IRLM left the data sharing group by disconnecting from both the XCF group and the lock structure. (XCF is the cross-system coupling facility component of z/OS.) IRLM takes this action when all identified DBMSs have issued a QUIT request to the IRLM to terminate their active data sharing activity. The message may also be issued by a new member attempting to JOIN the sysplex while a lock structure

rebuild is occurring. In this case, the disconnect is temporary and the IRLM should connect to the group when the rebuild is completed. If it does not, a dump should be taken and the IRLM terminated.

System Action: This IRLM disconnected from the data sharing group.

DXR137I *irlmx* **GROUP STATUS CHANGED.** *irlmx* **HAS BEEN DISCONNECTED FROM THE DATA SHARING GROUP**

Explanation: IRLM *irlmx* lost connectivity to the data sharing group.

irlmx The ID of the disconnected IRLM as explained in Figure 1 on page 427.

All surviving IRLMs issue this message. The disconnected IRLM might issue the DXR136I message.

System Action: IRLM *irlmx* was disconnected from the data sharing group.

System Operator Response: None is required on this z/OS system. See the DXR136I message for the proper operator response on the disconnected system.

DXR138E *irlmx* **QUERY STRUCTURE FOR LOCK TABLE** *wwwwwwww* **FAILED FOR GLOBAL INITIALIZATION, RETURN=***xx***, REASON=***yyyy*

Explanation: This message is issued when IRLM gets a nonzero return code from a QUERY to XCF for the lock structure size.

wwwwwwww
The lock table name passed at identify time or the LOCKTAB name specified on the IRLM startup procedure

IRLM is unable to connect to the data sharing group if it does not have a valid structure size.

System Action: IRLM does not connect to the data sharing group. The identify request for the DBMS attempting to identify is rejected.

System Operator Response: Try to determine from the return and reason codes specified in the message what the problem is with XCF. See the IXCQUERY section of *z/OS MVS Programming: Sysplex Services Reference* for an explanation of the return and reason codes. Restart the DBMS when the problem is fixed.

System Programmer Response: If the operator is unable to find the problem, determine why the XCF QUERY request failed.

DXR139E *irlmxzzzzzzzz* **REQUEST FAILED, RETURN=***xx***, REASON=***yyyy*

Explanation: An IRLM request to z/OS failed with an unexpected return and reason code. The request type is *zzzzzzzz*.

System Action: IRLM terminates with abend U2025.

System Operator Response: Notify the system programmer.

System Programmer Response: Use the request type, reason and return codes to find out what caused the failure. See *z/OS MVS Programming: Sysplex Services Reference* for an explanation of the return and reason codes. Save the IRLM dump for analysis by IBM service.

DXR140E *irlmx* **IRLMID=***zzz* **IS NOT UNIQUE FOR THE DATA SHARING GROUP IT ATTEMPTED TO JOIN**

Explanation: An IRLM attempted to join a data sharing group, but IRLMID *zzz* that was specified in the IRLM startup procedure was already in use by another IRLM in the group.

System Action: IRLM terminates with abend U2025.

System Operator Response: Notify the system programmer.

System Programmer Response: Change the IRLMID in the startup procedure to a number from 1 through 255 that is not already in use by another IRLM in the data sharing group.

DXR141I *irlmx* **THE LOCK TABLE** *wwwwwwww* **WAS ALLOCATED IN A** *zzzzzzzz* **FACILITY**

Explanation: The z/OS coupling facility containing the lock table being used by IRLM is executing in *zzzzzzzz* state.

zzzzzzzz
Volatile or Nonvolatile

The volatile state indicates that there is no battery backup for the facility if a power failure occurs.

wwwwwwww
The lock table name passed at identify time or the LOCKTAB name specified on the IRLM startup procedure.

System Action: Data sharing continues normally.

System Operator Response: Notify the system programmer.

System Programmer Response: Take some action to move to a nonvolatile structure if that is desired for better availability.

DXR142E *irlmx* **THE LOCK STRUCTURE** *wwwwwwww* **IS** *zzz***% IN USE**

Explanation: This message shows what percent of the available capacity of the lock structure is being used by the group and can indicate that some action is needed to relieve the storage.

wwwwwwww
The lock table name currently in use by the IRLM.

zzz One of the following values: 80, 90, 100.

System Action: This message stays on the console until the storage falls below 70% or until the operator removes the message. Data sharing continues, possibly with restrictions, depending on how full the lock structure is.

- At 80% full, data sharing continues with no restrictions, but storage is reaching a critical threshold.
- At 90% full, data sharing continues with restrictions. Only 'must-complete' type of requests that require lock structure storage are processed. All others that require lock structure storage are denied with an 'out of lock structure storage' reason code.
- At 100% full, data sharing continues with more restrictions. Any request that requires lock structure storage is denied with an 'out of lock structure storage' reason code.

System Operator Response: Notify the system programmer if there is a concern about running out of space in the lock structure.

System Programmer Response: Take some action to increase the size of the lock structure if more space is needed. Force to completion update-type transactions to free modify locks which will in turn free some lock structure storage.

DXR143I *irlmx* **REBUILDING LOCK STRUCTURE BECAUSE IT HAS FAILED OR AN IRLM LOST CONNECTION TO IT**

Explanation: The lock structure failed or one or more IRLMs lost connections to it. The IRLM attempts to rebuild all the current information into the new lock structure without modifying any of the attributes.

System Action: Data sharing is stopped while rebuild is in progress. After rebuild completes successfully, data sharing continues normally. If rebuild does not succeed, IRLM disconnects from the data sharing group.

System Operator Response: Notify the system programmer to repair the failed structure or connections to it.

System Programmer Response: Determine the reason for the structure or connection failure and take actions to recover the failed structure.

DXR144I *irlmx* **REBUILDING LOCK STRUCTURE BECAUSE ALL CONNECTIONS TO IT ARE IN USE**

Explanation: The last available connection to the lock structure was allocated. IRLM attempts to rebuild into another structure and modify the lock structure attributes to allow more connections.

System Action: Data sharing is stopped while rebuild is in progress. After rebuild completes successfully, data sharing continues normally with more connections available for the group. If rebuild does not succeed, data sharing continues but new members are not able to join the group.

System Operator Response: Determine whether the group needs to be able to handle more members, and if so, change the MAXUSRS parameter on the IRLMPROC.

System Programmer Response: Determine the reason why rebuild failed. Take actions to make a bigger structure available to handle the bigger group.

DXR145I *irlmx* **REBUILDING LOCK STRUCTURE AT OPERATORS REQUEST**

Explanation: The operator started rebuild with an MVS SETXCF command. IRLM attempts to rebuild into another structure without modifying any of the lock structure attributes.

System Action: Data sharing is stopped while rebuild is in progress. After rebuild completes successfully, data sharing continues normally. If rebuild failed, data sharing still continues normally.

System Operator Response: Ensure that rebuild completes successfully. Notify the system programmer if any problem occurs during rebuild. If rebuild failed, contact the system programmer to determine why.

System Programmer Response: Determine the reason why rebuild failed. Take actions to make the desired structure available.

DXR146I *irlmx* **REBUILD OF LOCK STRUCTURE COMPLETED SUCCESSFULLY WITH** *yyyyM* **LOCK TABLE ENTRIES AND** *nnnnnnnn* **RECORD LIST ENTRIES**

Explanation: The lock structure was successfully moved to another coupling facility structure. In the message text:

yyyy The number of lock table entries in units of 1,048,576. If the number of LTEs is less than one unit, *yyyy* is zero. The first IRLM to CONNECT to the group, causing structure allocation, dictates these values for the group.

nnnnnnnn The number of record list entries available in the coupling facility.

System Action: Data sharing continues normally.

DXR147I *irlmx* **REBUILD OF THE LOCK STRUCTURE WAS STOPPED**

Explanation: The lock structure could not be moved to another coupling facility structure. Rebuild process was terminated.

System Action: Data sharing continues normally if the old lock structure is still available. If the lock structure failed, IRLM disconnects from the group.

System Operator Response: Contact the system programmer to determine why rebuild was stopped.

System Programmer Response: Determine why rebuild was stopped. Take actions to make a suitable coupling facility structure available for rebuild.

DXR148I *irlmx* **REBUILD OF LOCK STRUCTURE WAS STOPPED BY THE OPERATOR**

Explanation: The operator issued a console command to stop the rebuild.

System Action: The REBUILD is stopped and IRLM will either DISCONNECT from the group or continue to process under the old structure, depending on the reason rebuild was initiated.

System Operator Response: If IRLM DISCONNECT from the group, follow local recovery procedures.

System Programmer Response: Determine why the rebuild was stopped and take appropriate action to restore rebuild capability.

DXR149I *irlmx* **REBUILD OF LOCK STRUCTURE WAS STOPPED DUE TO FAILURE OF A REQUIRED IRLM IN THE GROUP**

Explanation: Rebuild was stopped because one of the IRLMs involved in the rebuild has failed.

System Action: The REBUILD is stopped and IRLM will either DISCONNECT from the group or continue to process under the old structure, depending on the reason rebuild was initiated.

System Operator Response: If IRLM DISCONNECT from the group, follow local recovery procedures.

System Programmer Response: Determine why the IRLM failed and take appropriate action to restore rebuild capability.

DXR150I *irlmx* **REBUILD OF LOCK STRUCTURE WAS STOPPED DUE TO FAILURE OF THE NEW STRUCTURE**

Explanation: Rebuild was stopped because the NEW STRUCTURE failed.

System Operator Response: If IRLM DISCONNECT from the group, follow local recovery procedures.

System Action: The REBUILD is stopped and IRLM will either DISCONNECT from the group or continue to process under the old structure, depending on the reason rebuild was initiated.

System Programmer Response: Determine what failure occurred on the new structure and take appropriate action to restore rebuild capability.

DXR151I *irlmx* **REBUILD OF LOCK STRUCTURE WAS STOPPED DUE TO FAILURE ON QUERY OR CONNECT OF THE NEW STRUCTURE**

Explanation: Rebuild was stopped because IRLM received a bad return code on the IXCQUERY or IXLCONN request to XCF for the new structure.

System Action: The REBUILD is stopped and IRLM will either DISCONNECT from the group or continue to process under the old structure, depending on the reason rebuild was initiated.

System Operator Response: If IRLM DISCONNECT from the group, follow local recovery procedures.

System Programmer Response: Determine why the bad return code was received and take appropriate action to restore rebuild capability.

DXR152I *irlmx* **REBUILD OF LOCK STRUCTURE WAS STOPPED DUE TO AN OUT OF SPACE CONDITION ON THE NEW STRUCTURE**

Explanation: Rebuild was stopped because the new structure contains insufficient space to hold all of the data from the old structure or from the RESTART.

System Action: The REBUILD is stopped and IRLM will either DISCONNECT from the group or continue to process under the old structure, depending on the reason rebuild was initiated.

System Operator Response: If IRLM DISCONNECT from the group, follow local recovery procedures.

System Programmer Response: Determine why the new structure was not large enough to contain all of the data from the old structure or restart. Take appropriate action to restore rebuild capability.

DXR153I *irlmx* **REBUILD OF LOCK STRUCTURE WAS STOPPED DUE TO AN UNEXPECTED RETURN CODE FROM XES SERVICES**

Explanation: Rebuild was stopped because IRLM received a bad return code on a request to SLM.

System Action: The REBUILD is stopped and IRLM will either DISCONNECT from the group or continue to process under the old structure, depending on the reason rebuild was initiated.

System Operator Response: If IRLM DISCONNECT from the group, follow local recovery procedures.

System Programmer Response: Determine why the return code was received from SLM and take appropriate action to restore rebuild capability.

DXR154I *irlmx* **REBUILD OF LOCK STRUCTURE WAS STOPPED DUE TO SUCCESSFUL COMPLETION OF GROUP FUNCTION LEVEL CHANGE**

Explanation: IRLM started a REBUILD to establish a new group function level because a new member with a different service level is joining the group. The IRLM rebuild process then checks to see if a complete rebuild is needed to complete the group function level change. This message is issued when a complete rebuild is not needed for a successful group function level change.

System Action: The REBUILD is stopped and the new IRLM member joins the group.

DXR155I *irlmx* **REBUILD OF LOCK STRUCTURE WAS STOPPED DUE TO UNSUCCESSFUL COMPLETION OF GROUP FUNCTION LEVEL CHANGE**

Explanation: IRLM started a REBUILD to establish a new group function level because a new member with a different service level is joining the group. The IRLM rebuild process then checks to see if a complete rebuild is needed to complete the group function level change. This message is issued from the existing members when a joining member cannot coexist with one or more of the existing members of the group.

System Action: The REBUILD is stopped and the new IRLM member does not join the group. The DBMS that was identifying itself to the new IRLM member is notified that the IDENTIFY failed. Message DXR157I is issued by the member that was trying to join the group or message DXR158I is issued by other members in the joining member's behalf.

System Programmer Response: Compare the service level of the IRLM member that failed to join the group with the service level of the other IRLM members in the group. The pertinent service levels can be found by issuing the IRLM modify command "f irlmproc,status,alli" on all of the IRLMs involved.

DXR156I *irlmx* **REBUILDING LOCK STRUCTURE TO CHANGE THE GROUP FUNCTION LEVEL**

Explanation: This message is issued when IRLM starts a REBUILD to establish a new group function level when a new member with a different service level is joining the group. Later messages describe further actions IRLM takes during the process of changing the group function level.

System Action: The REBUILD is started. This allows IRLM to process a group function level change.

DXR157I *irlmx* **FAILED TO JOIN THE DATA SHARING GROUP BECAUSE IT CANNOT COEXIST WITH AT LEAST ONE OF THE EXISTING MEMBERS**

Explanation: The IRLM member, *irlmx*, could not coexist with one or more existing members of the group because of differences in service levels.

System Action: The REBUILD is stopped and the new IRLM member does not join the group. The DBMS that was identifying itself to the new IRLM member is notified that the IDENTIFY failed.

System Programmer Response: Compare the service level of the IRLM member that failed to join the group with the service level of the other IRLM members in the group. The pertinent service levels can be found by issuing the MVS modify command "f irlmproc,status,alli" on all the IRLMs involved.

DXR158I *irlmx* **CANNOT COEXIST WITH AT LEAST ONE EXISTING MEMBER. ALL DBMS IDENTIFY REQUESTS TO THAT IRLM WILL BE DENIED.**

Explanation: The IRLM member, *irlmx*, could not coexist with one or more existing members of the group because it does not have the service level that includes coexistence support.

System Action: The REBUILD is stopped and the new IRLM member is not allowed to join the group. The DBMS that was identifying itself to the new IRLM member is notified that the IDENTIFY failed.

System Programmer Response: Compare the service level of the IRLM member that failed to join the group with the service level of the other IRLM members in the group. The pertinent service levels can be found by issuing the MVS modify command "f irlmproc,status,alli" on all the IRLMs involved.

DXR159I *irlmx* **RUNTIMEO:TIMEOUT DATA COLLECTION STARTED.**

Explanation: The MODIFY irlmproc,RUNTIMEO has been successfully issued and time-out detection has been started. When two global deadlock cycles have

finished, DXR162I will be issued.

System Action: IRLM processing continues normally, with deadlock detection enabled for two global cycles.

System Operator Response: Watch for message, DXR162I, which indicates that data collection has completed. Then use RMF to generate the time-out BLOCKER/WAITER report. If no candidate waiters were found, the report will be null and no further action is required unless the waiters persist. If the waiters persist and no 79.15 records are written, attempt to recover by issuing the SETXCF REBUILD command, if applicable. If a report is generated, follow local operation guidelines. If diagnostic analysis is to be performed, take z/OS console dumps of the IMS and IRLM address spaces for each member before taking any recovery action. If this is in a sysplex environment, include XESDATA in the dump options. Contact the system programmer.

System Programmer Response: Determine if the wait is caused by application logic or other factors. If unable to determine the cause of the wait, contact IBM support with the documentation above.

DXR160I *irlmx* **RUNTIMEO:COMMAND IS NOT SUPPORTED BY AT LEAST ONE IRLM GROUP MEMBER, AND IS REJECTED.**

Explanation: At least one of the IRLMs in the group does not have the code necessary to support TIMEOUT. The TIMEOUT code must be present on all members.

System Action: IRLM processing continues normally, with no time-out detection.

System Operator Response: Notify the system programmer.

System Programmer Response: At least one IRLM in the data sharing group does not have PN79682 applied. The APAR must be applied to all IRLM members of the data sharing group.

DXR161I *irlmx* **RUNTIMEO:COMMAND IS NOT SUPPORTED BY ANY DBMS SUBSYSTEM ON THIS IRLM, AND IS REJECTED.**

Explanation: The MODIFY irlmproc,RUNTIMEO has been issued on this IRLM but none of the IMS systems identified to this IRLM provided a time-out exit.

System Action: IRLM processing continues normally.

System Operator Response: Notify the system programmer.

System Programmer Response: Determine why the IMS does not have time-out support code.

DXR162I *irlmx* **CYCLE NUMBER** *nnnnnnnn* **PROCESSED FOR TIMEOUT.**

Explanation: A TIMEOUT candidate has been detected on at least one IRLM. If an incompatible blocker was found, the IMS TIMEOUT EXIT has been driven to present WAITER/BLOCKER information.

System Action: IRLM processing continues normally. DXR162I is issued only by the Global Deadlock Manager (GDM), the IRLM with the lowest IRLMID in the IRLMPROC. The message will be issued once per minute if there is at least one candidate waiter found during the global deadlock cycle. If a cycle occurs and no time-out waiter is found during that time, the flag is reset and DXR162I will be issued the next time a candidate waiter is present.

System Operator Response: Based on local operational guidelines, use Resource Management Facility™ to generate a report from the 79.15 (4F 0F) SMF records with cycle number *nnnnnnnn*. If the message is issued and no 79.15 records are found, one of these errors is likely to have occurred:

- SMF has not been enabled for the 79.15 to be cut to the MAN* data set. Check the *.IEFU84 member for MODNAME(ERBDSSMF) on each system.
- SMF has not presented the 79.15 to the RMF data space due to a setup error in the data space. Make sure the data space has been defined. Enable the 79.15 to the RMF with: RMF,SMFBUF(,RECTYPE(79))
- The 79.15 record with cycle number *nnnnnnnn* was delayed in writing. Request the same cycle number again.
- IRLM did not find an incompatible blocker

If the waiter cannot be identified and you wish to consult IBM SERVICE, start the IRLM *INTERNAL* CTRACE for subtype XCF on each member, then collect MVS CONSOLE dumps of the IRLM(s) and their IMS DLI and any suspicious dependent regions. If this is in a sysplex environment, you must take and save dumps of all IRLMs with XESDATA and associated DBMS regions. Once the dumps are captured, you may turn off XCF tracing. If it appears to be an invalid WAIT condition and this is a sysplex environment, issue a SETXCF REBUILD to attempt recovery. If this fails to resume the waiter, follow local operation guidelines.

System Programmer Response: Determine if the wait is caused by application logic, operator error, or other factors. (The most common cause is incorrect dispatch priority). If you are unable to determine the cause of the wait, contact IBM support with the documentation above.

DXR163I *irlmx* **RUNTIMEO:COMMAND IS NOT SUPPORTED BY AT LEAST ONE OF THE OTHER DBMS GROUP MEMBERS, AND IS REJECTED.**

Explanation: The MODIFY irlmproc,RUNTIMEO has been issued on this IRLM and at least one of the IMS did not specify a time-out exit on this IRLM or another IRLM in the group.

System Action: IRLM processing continues normally.

System Operator Response: Notify the system programmer.

System Programmer Response: Determine why the IMS does not have time-out support code.

DXR164E *irlmx* **CANNOT RECOVER FOR A FAILED MEMBER DUE TO LOSS OF CONNECTIVITY TO THE LOCK STRUCTURE**

Explanation: IRLM detects loss of connectivity to the lock structure during member recovery or global initialization. IRLM is longer able to support data sharing without the retained lock information.

System Action: Disconnect from the data sharing group.

User Response: Notify the system programmer to correct the problem with the coupling facility.

Problem Determination: See IXC messages to determine the root cause of the failure and the appropriate corrective action.

DXR165I *irlmx* **TERMINATED VIA IRLM MODIFY COMMAND**

Explanation: An operator issued a MODIFY IRLM,ABEND command.

System Action: IRLM shuts down.

DXR166E *irlmx* **CONNECT TO LOCK STRUCTURE FAILED FOR GLOBAL INITIALIZATION**

Explanation: IRLM detects loss of connectivity to the lock structure during member recovery or global initialization. IRLM is longer able to support data sharing without the retained lock information.

System Action: Disconnect from the data sharing group.

User Response: Notify the system programmer to correct the problem with the coupling facility.

Problem Determination: See IXC messages to determine the root cause of the failure and the appropriate corrective action.

DXR167E *irlmx* **IRLM HAS DETECTED A DELAY IN COMPLETION OF** *vvvvvvvv* **PROCESS.**

Explanation: IRLM has detected a delay in some process that might prevent other DBMS or IRLM processes from running.

vvvvvvvv

ASID*xxxx*
Issued when IRLM is unable to process main latch activity for some period and finds a DBMS agent that appears to be inactive. This is usually the result of low dispatch priority for some task on an over-committed CPU. Can cause all the symptoms listed under System Action.

MAIN_SRB
Issued in a sysplex when IRLM detects that a main latch process has been active for an extended period of time. This is usually caused when there are too many waiters in a sysplex such that the IRLM deadlock SRB must execute for long periods of time in order to resolve all of the waiting relationships. Might cause all of the symptoms listed under System Action.

DPRIORTY
Issued when IRLM is unable to get its main latch for some period of time but the Health routine cannot identify any delayed request. This is usually the result of having an incorrect dispatch priority set for the IRLM when compared to the rest of the application tasks or DBMS address spaces. Might cause all of the symptoms listed under System Action.

NOTIFY_G
Issued in a sysplex when IRLM detects that this member sent a NOTIFY to peer members and at least one peer has not responded for some period of time. Might cause all of the symptoms listed under System Action.

NOTIFY_L
Issued when IRLM finds a NOTIFY Exit drive to its DBMS subsystem has not returned for some period. If this is a sysplex, the peer member should issue NOTIFY_G. Might cause all of the S2 symptoms listed under System Action.

MAXCYCLE
Issued when IRLM is unable to process all of the waiters during a

deadlock cycle because the number of waiting relationships created would require excessive SRB execution time. May result in all S2 symptoms listed below. This is usually the result of an application problem or a temporary lock-up that allowed the number of waiters in the sysplex to be come excessive, typically in the hundreds. This lock-up could be the result of an application deadlock occurring and not broken quickly because global deadlock is running too slowly. If the transaction rate is high and a deadlock occurs on key resources and is not detected and broken quickly, it can result in many tasks being suspended and involved in deadlocks.

System Action: The IRLM continues operation. This message stays on the console until the delay is no longer detected. When all DXR167E delays are corrected, IRML issues DXR168I. The delayed completion might prevent other IRLM or DBMS processes from running. These delayed processes might cause any of the following symptoms:

- A new DBMS cannot identify.
- New members might not be able to join. They will time out during global initialization and eventually terminate abnormally.
- A terminated DBMS is not resumed.
- Failed members might not get properly partitioned from the group because recovery actions for them cannot run.
- Transactions do not deadlock or time out.
- REBUILD of the IRLM will not run.
- S2 symptoms:
  - A transaction locks up.
  - Other processes contending with the locked-up process might also lock up, potentially causing a chain reaction.
  - The whole group might lock up.

System Operator Response: Notify the system programmer. Follow established operations procedures.

System Programmer Response: This delayed process might not cause a noticeable problem to the users. If no problems are observed or reported, monitor the system for the completion of the delayed process. If problems with the system are observed, take the following actions based on the variable term in the message.

Recommendation: If you plan to pursue the problem with IBM Service, capture the appropriate documentation before taking recovery actions. If dumps are not captured prior to the DXR167E being removed, IBM Service might not have the documentation needed to resolve the problem.

Respond according to the following variables found in *vvvvvvvv*.

ASID*xxxx*

Identify the task in question using *xxxx*, which is the address space identifier (ASID), in hexadecimal, of the detected task. IRLM will attempt to increase the task's priority in order to get the CPU cycles required to complete the task. The priority of the task will be returned to its previous value when IRLM processing finishes. If message DXR167E with this ASID continues to be displayed and message DXR168I is not displayed, terminate this task to return to normal processing.

Important: Take dumps of this DBMS, IRLM, and ASID*xxxx* before taking any action. Also, include the text of the DXR167E message from the System Console when opening a problem report with IBM Service.

MAIN_SRB

You can continue to wait for it to complete, terminate the DBMS or IRLM with the most WAITers shown by the modify command F irlfproc, STATUS, or try to terminate WAITing tasks.

Important: Take dumps of all DBMSs and IRLM ASIDs before taking any action.

DPRIORTY

Correct the dispatching priority order.

Important: Take dumps of this DBMSs and IRLM ASIDs before taking any action.

NOTIFY_G

Terminate the IRLM or DBMS that issued the NOTIFY_L message.

Important: Take dumps of all DBMS and IRLM where the DXR167E is issued. If only NOTIFY_G is seen, take dumps of all DBMS and IRLM ASIDs before taking any action.

NOTIFY_L

Terminate the DBMS or IRLM that issued the NOTIFY_L message.

Important: Take dumps of all DBMS and IRLM where the DXR167E is issued. If only NOTIFY_G is seen, take dumps of all DBMS and IRLM ASIDs before taking any action.

MAXCYCLE

Consider lowering the first value of the DEADLOK parameter in the irlmproc. Issue MODIFY irlmproc, STATUS on each member. If the message persists, terminate the IRLM with the largest of waiters.

Important: Take dumps of all DBMSs and IRLM ASIDs before taking any action.

DXR168I *irlmx* **DELAYED PROCESSES NO LONGER DETECTED**

Explanation: This message appears if all situations reported in a previous DXR167E messages have been resolved.

System Action: The IRLM continues normal operation.

System Operator Response: Notify the system programmer.

System Programmer Response: Try to determine what might have caused the temporary problem based on the variable insert in the DXR167E message.

DXR169I *irlmx* **THE STORAGE SHORTAGE FOR LOCK STRUCTURE** *wwwwwwww* **HAS BEEN RELIEVED.**

Explanation: This message indicates that the storage shortage indicated by a previously reported DXR142E message is relieved. The amount of the lock structure in use has dropped below 70%.

wwwwwwww
The lock table name currently in use by the IRLM.

System Action: IRLM resumes normal data sharing with no restrictions.

DXR170I *irlmx* **THE LOCK STRUCTURE** *wwwwwwww* **IS** *zz***% IN USE**

Explanation: This message shows what percent of the available capacity of the lock structure is being used by the group. The values are 50%, 60% and 70%. This message is issued only once at each of the three levels of usage and gives an indication of peak usage during the execution of an IRLM subsystem.

wwwwwwww
The lock table name currently in use by the IRLM.

zz One of the following values: 50, 60, 70.

System Action: The IRLM continues operation.

System Operator Response: Notify the system programmer.

System Programmer Response: This message is a warning that there is a potential to overcommit the storage for the lock structure named in the message. Track the occurrences of this message to determine a growth trend. If a growth pattern is detected, increase the storage size specifications for the lock structure in the coupling facility policy and activate the revised policy.

DXR171I *irlmxxxxxxxxx* **ARM REGISTRATION FAILED, MVS ARM RETURN CODE =** *yyyyyyyy***, MVS ARM REASON CODE =** *xxxxxxxx*

Explanation: IRLM encountered an error using the specified z/OS automatic restart manager (ARM) function. The *xxxxxxxx* is the IRLM ARM element name. For data sharing environments, it is a concatenation of the IRLM group name, the IRLM subsystem name, and the IRLM ID. For non-datasharing environments, it is the IRLM subsystem name and the IRLM ID.

System Action: IRLM continues. However, if IRLM abnormally terminates, the z/OS ARM cannot automatically restart IRLM.

System Programmer Response: Refer to the *z/OS MVS Programming: Sysplex Services Reference* for the function, return code, and reason code from the IXCARM request.

DXR172I *irlmxxxxxxxxx* **ARM READY COMPLETED. MVS ARM RETURN CODE =** *yyyyyyyy***, MVS ARM REASON CODE =** *xxxxxxxx*

Explanation: IRLM initialization has gone far enough to allow ARM to continue restart of dependent element types (SYSDB2, SYSIMS). *xxxxxxxx* is the IRLM ARM element name. For data sharing environments, it is a concatenation of the IRLM group name, the IRLM subsystem name and the IRLM ID. For non-data sharing environments, it is the IRLM subsystem name and the IRLM ID. If the return and reason codes are not zero, IRLM encountered an error using the specified z/OS automatic restart manager (ARM) function.

System Action: IRLM continues. However, if the return and reason codes are not zero, and IRLM abnormally terminates, the z/OS ARM cannot automatically restart IRLM.

System Programmer Response: Refer to *z/OS MVS Programming: Sysplex Services Reference* for the function, return code, and reason code from the IXCARM request.

DXR173I *irlmxxxxxxxxx* **ARM DEREGISTRATION FAILED. MVS ARM RETURN CODE =** *yyyyyyyy***, MVS ARM REASON CODE =** *xxxxxxxx*

Explanation: IRLM encountered an error using the specified z/OS automatic restart manager (ARM) function. The *xxxxxxxx* is the IRLM ARM element name. For data sharing environments, it is a concatenation of the IRLM group name, the IRLM subsystem name and the IRLM ID. For non-data sharing environments, it is the IRLM subsystem name and the IRLM ID.

System Action: IRLM continues. However, if IRLM

terminates normally or abnormally, the z/OS ARM automatically restarts IRLM.

System Programmer Response: Refer to *z/OS MVS Programming: Sysplex Services Reference* for the function, return code, and reason code from the IXCARM request.

DXR174E *irlmxxxxxxxxxcsect-name* **ARM EVENT EXIT FAILED.**

Explanation: IRLM ARM event exit encountered an error while attempting to define the IRLM subsystem to z/OS.

System Action: The automatic restart of the IRLM subsystem stops.

System Programmer Response: Refer to *MVS/ESA Programming: Authorized Assembler Services Reference, Volume 2* for return and reason codes from the IEFSSI request. You can manually start IRLM by using the *S* irlmproc command on any system where the IRLM subsystem is defined. If you are using DB2 UDB for z/OS and have AUTO START = *yes* for IRLM defined in DSNZPARM, then when DB2 UDB for z/OS starts it tries to start IRLM if IRLM is not already up.

DXR175E *irlmx* **IRLM IS UNABLE TO OBTAIN STORAGE -** *storage_type*

Explanation: IRLM is attempting to acquire storage from CSA or ECSA when either the MAXCSA value specified on IRLM startup has been exceeded or the storage type needed is exhausted.

The value in field *storage_type* specifies the cause of the error:

- *MCSA* means MAXCSA has been exceeded.

  This can be caused by:

  too low a value for the IRLM startup parameter, or

  an unexpected peak of IRLM work load.
- *CSA* means system CSA has been exhausted.

  This can be caused by:

  too little CSA generated into the system, or

  an unexpected peak of demand for CSA storage by the jobs and tasks running in the z/OS system.
- *ECSA* means system ECSA has been exhausted.

  This can be caused by:

  too little ECSA generated into the system, or

  an unexpected peak of demand for ECSA storage by the jobs and tasks running in the z/OS system.

System Action: The IRLM continues operating as best it can. This message stays on the console until IRLM is able to acquire the needed storage. Some DBMS requests might be processed successfully, some might be rejected with out of storage return and reason codes, and some might hang. When the out of storage condition is relieved, normal IRLM operation resumes.

Because storage is unavailable, the following symptoms might occur:

- Transactions might abend with out of storage indications
- Message DXR167E might be issued
- Transactions might hang
- Other processes contending with a hung process will also hang, potentially causing a chain reaction
- The system hangs
- If in a data sharing environment:
  - The whole group might hang.
  - New members might not be able to join. They will time out during global initialization and eventually terminate abnormally.
  - Failed members might not get properly partitioned from the group because recovery actions for them cannot run.

System Operator Response: Notify the system programmer. Try to reduce the work load on the system or the number of transactions running in the DBMS.

System Programmer Response: Determine what is preventing IRLM from obtaining storage. If MAXCSA is too low, specify a larger value, or change the PC parameter to YES. If CSA or ECSA was exhausted, generate more CSA or ECSA into the system or reduce the number of running tasks that are dependent on CSA or ECSA. The `MODIFY irlmproc,SET` command may be used to change certain IRLM tuning parameters, such as MAXCSA, without restarting IRLM. Refer to the *IMS Version 9: Command Reference* for further information. If the condition is from an operational error that can be corrected without shutting down IRLM, correct it as soon as possible. Otherwise, shut down IRLM, correct the problem, and restart IRLM.

DXR176I *irlmx* **IRLM STORAGE SHORTAGE RELIEVED**

Explanation: This message appears if a situation reported in a previous DXR175E message has been resolved.

System Action: The IRLM continues operation.

System Operator Response: Notify the system programmer.

System Programmer Response: Try to determine what might have caused the temporary problem as reported in a previous DXR175E message. The most likely reasons are too small a value for the IRLM startup parameter MAXCSA or insufficient CSA or ECSA for the combined tasks running in z/OS. The `MODIFY irlmproc,SET` command may be used to change certain IRLM tuning parameters, such as MAXCSA, without restarting IRLM. Refer to the *IMS Version 9: Command Reference* for further information. If possible, correct the problem without shutting down IRLM.

DXR177I *irlmx* **THE VALUE FOR** *nnnnnnnn* **IS SET TO** *xxxx*

Explanation: This message is issued in response to the following command:

```
F irlmproc,SET,TRACE=nnn
```

In the message text, *nnnnnnnn* is one of the following values:

- DEADLOCK
- LTE
- MAXCSA
- TIMEOUT
- TRACE

System Action:

DEADLOCK
When *nnnnnnnn* is DEADLOCK, *xxxx* is a value between 100 and 5000 an represents the number of milliseconds used for the IRLM deadlock interval. The value displayed will be in even 100 millisecond increments.

If this IRLM is connected to the group, this message appears on each member currently connected as they update their control block during deadlock processing.

The DEADLOCK interval frequency is changed to the number of milliseconds displayed in the message as each IRLM updates its local control blocks. The global deadlock interval is aborted and global deadlock processing reinitialized to synchronize all members.

LTE When *nnnnnnnn* is LTE, *xxxx* is a value between 0 and 1024 and represents the number of Lock Table Entries available in the Coupling Facility. The value must be either zero or a power of two with each increment representing 1048576 entries.

If this IRLM is connected to the group, this message appears on each member currently connected as they update their control block during deadlock processing. The value entered with the SET command, does not take affect unless the IRLM is the first to join the group. This can be either during normal group startup or during a REBUILD. If the value specified is zero or too large for the IXCQUERY policy size returned, then the IRLMPROC LTE value is used. If the IRLMPROC LTE value is blank, zero, or also too large, the number of entries is calculated by irlm to the nearest power of 2 after dividing the returned size by two.

MAXCSA
When *nnnnnnnn* is MAXCSA, *xxxx* is the value of MAXCSA set in megabytes. MAXCSA controls storage use for lock structures. The lock control structures are allocated from ECSA when PC=NO. If PC=YES has been specified, this command has no affect. The system automatically adjusts *xxxx* to a number between 0 and 999 if number specified is not in this range. If the new MAXCSA value is smaller than the current IRLM CSA allocation for accountable lock structures, IRLM will reduce its CSA storage when the storage is no longer needed.

TIMEOUT
When *nnnnnnnn* is TIMEOUT, *xxxx* is a value between 1 and 3600 seconds. This value must be a multiple of the local deadlock parameter. If the value entered by the user is not an even multiple, the next higher multiple is used. If the value specified is out of range, the maximum or minimum is used. Since serialization is needed to change the internal time-out value, it is done during the next deadlock cycle. The DXR177I message is not issued until the input has been validated and the value changed during a deadlock cycle. The message also displays the name of the DBMS subsystem whose time-out value was changed.

TRACES
When *nnnnnnnn* is TRACES, *xxxx* is a value between 10 and 255. Each trace buffer requires 64KB of ECSA storage. IRLM can use a maximum of 255 and a minimum number of 10 trace buffers for each trace type. The system automatically adjusts *xxxx* to the maximum or minimum allowed if the value specified is out of range. The value specified does not apply if the EXTERNAL CTRACE write is active. If the number of trace buffers set by the command is less than the current buffer allocation, IRLM frees the oldest buffers until the number allocated equals the number set by the command.

Programmer Response: None.

DXR179I *irlmx* **TRACE USAGE TRACE BUFFER STORAGE IN USE: nnnnnKB MAXIMUM NUMBER OF TRACE BUFFERS ALLOWED PER TRACE TYPE: nnn TRACE TYPE ACTIVE BUFFERS IN USE CTRACE WRITER**

Explanation: This message is issued in response to the following command:

```
F irlmproc,STATUS,TRACE
```

The message indicates the maximum number of 64KB buffers that IRLM can use for each of its subcomponent trace types.

TRACE TYPE
The trace types are:

SLM Traces interactions with z/OS locking component. Applicable only for data sharing

XIT Traces asynchronous interactions with the z/OS locking component. Applicable only for data sharing

XCF Traces interactions with z/OS cross-system coupling services. Applicable only for data sharing.

DBM Traces interactions with the DBMS identified to this IRLM.

EXP Traces exception conditions.

INT Traces member and group events outside normal locking activity.

ACTIVE
Whether the trace is active. (You cannot deactivate the EXP and INT traces.)

BUFFERS IN USE
How many 64KB buffers are currently being used by this trace.

CTRACE WRITE
Whether the external CTRACE writer is on.

System Action: Processing continues normally.

System Operator Response: Trace buffers can be set using the `modify irlmproc,set,trace=nnn` command. You can activate or deactivate traces by using the `TRACE CT` command of z/OS. You cannot turn off the EXP and INT traces. The XIT, EXP and INT are automatically activated when you start IRLM. All traces are automatically activated when TRACE=YES is specified on the IRLMPROC.

DXR180I *irlmx* **AUTOMATIC RESTART MANAGER IS NOT ENABLED**

Explanation: IRLM attempts to utilize the z/OS Automatic Restart Manager (ARM) function, but either the system does not have access to an ARM couple data set or the ARM is not set up in the user's environment.

System Action: IRLM continues; however, if IRLM abnormally terminates, the z/OS ARM cannot automatically restart IRLM.

System Operator Response: Notify the system programmer.

System Programmer Response: Determine why the system does not have access to an automatic restart manager couple data set. If there is no automatic restart manager couple data set defined, determine if the ARM should be set up so that IRLM can take advantage of the z/OS ARM function. The purpose of using the ARM is to reduce the time IRLM is down. When IRLM stops abnormally, the z/OS ARM will restart it automatically.

DXR181I *irlmx* **RUNTIMEO COMMAND DISABLED**

Explanation: The IRLMs are doing automatic time-out detection and the command is not needed.

System Action: IRLM processing continues.

DXR182I *irlmx* **MODIFY DIAG COMMAND PROCESSED**

Explanation: This message is issued in response to an `IRLM MODIFY irlmproc,DIAG` command.

System Action: IRLM processing continues.

DXR183I **irlmx DEADLOCK PROCESSING RESTARTED**

Explanation: An operator issued the `MODIFY irlmproc,DIAG, HANG` command to collect dumps for problem analysis.

System Action: The IRLM has restarted deadlock processing following an operator `MODIFY DIAG,HANG` command to collect dumps for problem analysis.

System Operator Response: If this message is NOT issued by any IRLM after this command has been used, that IRLM must be terminated and restarted.

IRLM Request Return and Reason Codes

The IRLM error return and reason codes are listed below. DBMS refers to the database management system you are using. Some return and reason codes do not apply to IMS operation.

The values in the 'return code' column show the request completion status:

00 The request completed successfully.

04 The request completed successfully, but the state of lock remained unchanged.

08 The request completed unsuccessfully because of a system error or condition, not a problem in the request.

12 The request completed unsuccessfully because of a logic error in the request.

16 The request completed unsuccessfully because of an invalid request specification.

20 The request completed unsuccessfully because IRLM resources are not available.

The following topics provide additional information:

- "IDENT Request"
- "QUIT Request" on page 448
- "LOCK Request" on page 448
- "UNLOCK Request" on page 449
- "NOTIFY Request" on page 450
- "VERIFY Request" on page 450
- "PURGE Request" on page 451
- "CHANGE Request" on page 451
- "QUERY Request" on page 453
- "TAKEOVER Request" on page 453
- "STAT Request" on page 453
- "SYNC Request" on page 454
- "PLEXIT Request" on page 454

IDENT Request

Return Code	Reason Code	Description
04 (X'04')	X'40'	IRLM is registered with the Automatic Restart Manager (ARM).
	X'10'	Locks are held from the previous IDENT request. Locks held by the identifying DBMS from a previous failure are still in protected status. For additional information, see the `MODIFY (F) irlmproc,STATUS` command in the *IMS Version 9: Command Reference*.
08 (X'08')	X'80'	A non-recoverable system error occurred while processing this request.
	X'40'	A z/OS subsystem interface (SSI) error occurred during identification. Ensure that the 4-character IRLM name used by the subsystem to identify to the IRLM was defined as a z/OS subsystem, and that the IRLM subsystem with the same name was started.
	X'04'	Identify for recovery (SSTYPE=RECON) was requested, but this IRLM has no retained information about this DBMS.
	X'01'	There is insufficient storage for the IRLM to process the IDENT request. After all other subsystems identified to the IRLM have quit, terminate the IRLM and increase the storage available to the IRLM before restarting it.
16 (X'10')	X'80'	The lock table name is invalid. It probably contains blanks.
	X'40'	The SSNAME is invalid. An active DBMS in the data sharing group is already using this name.
	X'20'	A required exit is missing. If a TIMEOUT exit is specified, TIMEV must be greater than 0.
	X'10'	A read-only request is not allowed. Locks are retained for this DBMS.
	X'08'	This request violates the single DBMS/IRLM rule.
	X'04'	The address of the BACKUP subsystem name pointed to inaccessible storage.
	X'02'	This IRLM does not support the requested function level. A probable cause is the version/release of this IRLM does not support this version/release of the DBMS. IRLM is back-level.
	X'01'	The IRLM failed to connect to the data sharing group and abended. After fixing the connection error, reconnect the IRLM to the data sharing group. This error can also occur when two versions of IRLM with the same IRLMID, running on separate images, are using the same IRLM JOBNAME.
20 (X'14')	N/A	IRLM services are not available.

QUIT Request

Return Code	Reason Code	Description
04 (X'04')	X'10'	Modify locks are retained.
08 (X'08')	X'80'	A non-recoverable system error occurred while processing this request.
	X'01'	There is insufficient storage for the IRLM to process the QUIT request. After all other subsystems identified to the IRLM have quit, terminate the IRLM and increase the storage available to the IRLM before restarting it.
12 (X'0C')	X'80'	The owing work unit (OWU) specified on a HELD=WORKUNIT request was not found.
	X'40'	The owning work unit (OWU) parameter was not specified on a HELD=WORKUNIT request.
	X'20'	A QUIT HELD=RETAIN request was already processed.
	X'10'	This IRLM has no knowledge of this DBMS. Either a QUIT HELD=RELEASE was already processed or the DBMS was never identified to this IRLM.
	X'01'	Locks are held, but the HELD parameter was omitted.
20 (X'14')	N/A	IRLM services are not available.

LOCK Request

Return Code	Reason Code Byte 1	Reason Code Byte 2	Description
04 (X'04')	X'80'		A restart lock successfully reacquired a retained lock.
	X'40'		Modify lock was granted, but no Record List Entry (RLE) was requested in the CF.
	X'20'		Other lock holders exist.
	X'10'		The lock is already held.
	X'08'		This lock was involved in a deadlock, but was not selected as a victim.
	X'04'		Another work unit holds the lock private.
		X'04'	At least one other work unit holds the lock with the repeatable read (RR) attribute.
		X'02'	The work unit that submitted this lock request holds the lock with the repeatable read (RR) attribute.
08 (X'08')	X'80'		A non-recoverable system error occurred while processing this request.
	X'40'		The lock is not available in the requested state. MODE=COND was specified.
	X'20'		The request was rejected because of a deadlock or time-out.
	X'10'		The lock request cannot be granted because of the failure of another DBMS that holds a retained lock in a state incompatible with the requested state of this request. This subcode is also issued when the lock cannot be granted because of an incompatibility with a lock in NOWAIT status. A lock is placed in this status when a QUIT,HELD=WORKUNIT is issued to the IRLM.
	X'08'		The DBMS is operating in CLEANUP mode because a system failure occurred or because retained locks were deleted without a guarantee that database recovery was done. The DBMS must issue a PURGE request before any global lock request is allowed to wait.
	X'04'		Another holder holds the restart lock in an incompatible state.
	X'02'		The maximum number of locks that can be held by this work unit was exceeded. The LOCKMAX parameter specifies the maximum.

Return Code	Reason Code Byte 1	Reason Code Byte 2	Description
	X'01'		There is insufficient storage for the IRLM to process the LOCK request. After all other subsystems identified to the IRLM have quit, terminate the IRLM and increase the storage available to the IRLM before restarting it.
		X'80'	This request was involved in lock negotiation with other DBMSs and was denied.
		X'40'	This request was involved in lock negotiation with other DBMSs. Either a DBMS downgraded its held state to a still incompatible state, or a reason code to deny the conflicting request was not provided.
		X'20'	Two different work units executing on the same IRLM tried to get the same P-lock. Only one work unit is allowed for each resource name on an IRLM.
		X'10'	No more record list entries are available.
		X'08'	An environmental error occurred in the System Lock Manager (SLM) component of z/OS.
		X'04'	The lock is held by at least one other work unit with the repeatable read (RR) attribute.
		X'02'	The lock is held with the repeatable read (RR) attribute by the work unit that submitted this request.
12 (X'0C')	X'01'		This IRLM already has a modify lock.
		X'80'	A work unit within this IRLM already holds the P-lock. Only one owning work unit is allowed to hold interest in a P-lock within an IRLM.
		X'40'	An illegal attempt was made to change a Compatibility Class Token (CCT). A previous lock or change request had specified a CCT (non-zero), and the most recent request specified a CCT that did not match.
16 (X'10')	X'40'		The CLASS is invalid. The value is greater than 31.
	X'20'		The STATE is invalid. The value is 0 or greater than 11.
	X'08'		The SCOPE is invalid. A previous request defined a different SCOPE for the resource.
	X'04'		The TOKEN or PARENT TOKEN is invalid.
	X'02'		The resource name (RNA) length is invalid. The length specified is less than 2 or greater than 32 bytes.
	X'01'		An invalid retained state was specified. The retained state is greater than the requested state. If the lock was granted and then retained, it could exist in an incompatible state with other holders.
20 (X'14')	N/A		IRLM services are not available.

UNLOCK Request

Return Code	Reason Code	Description
04 (X'04')	X'80'	One or more locks are held. Some locks did not satisfy the generic resource specification.
	X'20'	Additional locks are held in other states. This applies only to count-by-state locks.
	X'10'	The IRLM cannot release one or more parent locks because child locks exist.
	X'08'	The lock was not fully released.
	X'04'	The work unit holds locks in other classes.
	X'02'	Locks could not be released because the duration specified on the request was lower than the duration previously set.
08 (X'08')	X'80'	A non-recoverable system error occurred while processing this request.

Return Code	Reason Code	Description
	X'01'	There is insufficient storage for the IRLM to process the UNLOCK request. After all other subsystems identified to the IRLM have quit, terminate the IRLM and increase the storage available to the IRLM before restarting it.
12 (X'0C')	X'40'	The work unit does not hold the lock.
	X'20'	No lock exists for the specified resource hash and name values.
	X'08'	The lock is not held in the specified STATE.
	X'04'	The lock is not held in the specified class.
16 (X'10')	X'40'	The CLASS is invalid. The value is greater than 31.
	X'20'	The STATE is invalid. The value is greater than 11.
	X'10'	The owning work unit (OWU) parameter is not specified.
	X'04'	The TOKEN is invalid.
	X'02'	The resource name (RNA) length is invalid. The length specified is less than 2 or greater than 32 bytes.
	X'01'	TYPE=GENERIC was specified, but no resource name (RNA) was specified.
20 (X'14')	N/A	IRLM services are not available.

NOTIFY Request

Return Code	Reason Code	Description
04 (X'04')	X'80'	An asynchronous request was accepted.
	X'40'	The receiver returned additional return code information to the requester.
	X'20'	A selective notify request was made, but there were no DBMSs with the right qualifications to receive this request.
	X'02'	One or more DBMSs holding locks failed and could not be notified.
08 (X'08')	X'80'	A non-recoverable system error occurred while processing this request.
	X'01'	There is insufficient storage for the IRLM to process the NOTIFY request. After all other subsystems identified to the IRLM have quit, terminate the IRLM and increase the storage available to the IRLM before restarting it.
12 (X'0C')	X'40'	The lock is not held by the specified owning work unit.
	X'20'	No lock exists for the specified resource hash and name values.
16 (X'10')	X'80'	The message area address is invalid.
	X'08'	The message length is zero.
	X'04'	The TOKEN is invalid.
	X'02'	An invalid resource name was specified. The length is less than 2 or greater than 32 bytes.
20 (X'14')	N/A	IRLM services are not available.

VERIFY Request

Return Code	Reason Code	Description
00	X'80'	The VERIFY request completed successfully, but at least one entry in the VERIFY list was not known to IRLM.
	X'40'	IRLM recognized at least one entry in the VERIFY list, but the entry did not have matching DBRC RECON status.
08 (X'04')	X'80'	A non-recoverable system error occurred while processing this request.
	X'01'	There is insufficient storage for the IRLM to process the VERIFY request. After all other subsystems identified to the IRLM have quit, terminate the IRLM and increase the storage available to the IRLM before restarting it.
16 (X'10')	X'80'	The VERIFY SSNAREA area address is invalid.
20 (X'14')	N/A	IRLM services are not available.

PURGE Request

Return Code	Reason Code	Description
04 (X'04')	X'10'	The locks are already released.
	X'08'	The PURGE-required count was decremented.
08 (X'08')	X'80'	A non-recoverable system error occurred while processing this request.
	X'01'	There is insufficient storage for the IRLM to process the PURGE request. After all other subsystems identified to the IRLM have quit, terminate the IRLM and increase the storage available to the IRLM before restarting it.
12 (X'0C')	X'80'	A PURGE TYPE=TAKEOVER was issued, but the requester did not issue a corresponding TAKEOVER request.
	X'40'	A PURGE TYPE=SFAIL was issued, but this IRLM is still part of the data sharing group. An IRLM cannot be in system failed state while it is part of a data sharing group. This code indicates that the DBMS has invalid information about its status in the group.
20 (X'14')	N/A	IRLM services are not available.

CHANGE Request

Return Code	Reason Code Byte 1	Reason Code Byte 2	Description
04 (X'04')	X'80'		Ownership or duration, or both was specified, but no locks were changed for one of these reasons: • The 'set of locks' specified included no held locks. • All specified locks had a duration value greater than or equal to the specified duration. • PSTATE=TSTATE was specified.
	X'20'		Other holders of the lock exist.
	X'10'		From-duration was specified on a CHANGE ALL request, but the from-duration did not match the held-duration for at least one lock. The mismatched lock is not altered, but other locks might have been altered.
	X'08'		This lock was involved in a deadlock condition, but was not selected as the victim.
	X'02'		The CHANGE STATE request specified a 'tstate' value less restrictive than the current held state of the lock.
		X'04'	At least one other work unit holds the lock with the repeatable read (RR) attribute.
		X'02'	The work unit that submitted this lock request holds the lock with the repeatable read (RR) attribute.
08 (X'08')	X'80'		A non-recoverable system error occurred while processing this request.
	X'40'		The lock is not available in the requested state. MODE=COND was specified.
	X'20'		The request was rejected because of a deadlock.
	X'10'		The lock request cannot be granted because of the failure of another DBMS that holds a retained lock in a state incompatible with the requested state of this request. This subcode is also issued when the lock cannot be granted because of an incompatibility with a lock in NOWAIT status. A lock is placed in this status when a QUIT,HELD=WORKUNIT is issued to the IRLM.

Return Code	Reason Code Byte 1	Reason Code Byte 2	Description
	X'08'		The DBMS is operating in CLEANUP mode because a system failure occurred or because retained locks were deleted without a guarantee that database recovery was done. The DBMS must issue a PURGE request before any global lock request is allowed to wait.
	X'01'		There is insufficient storage for the IRLM to process the CHANGE request. After all other subsystems identified to the IRLM have quit, terminate the IRLM and increase the storage available to the IRLM before restarting it.
		X'80'	This request was involved in lock negotiation with other DBMSs and was denied.
		X'40'	This request is involved in lock negotiation with other DBMSs. A DBMS downgraded its held state to a still incompatible state or a reason code to deny the conflicting request was not provided.
		X'20'	The request specified the repeatable read (RR) attribute, but not a resource name (RNA) or token.
		X'10'	No more record list entries are available.
		X'08'	An environmental error occurred in the System Lock Manager (SLM)) component of z/OS.
		X'04'	At least one other work unit holds the lock with the repeatable read (RR) attribute.
		X'02'	The work unit that submitted this lock request holds the lock with the repeatable read (RR) attribute.
12 (X'0C')	X'80'		An invalid request to change a work unit's Compatibility Class Token was issued. The value in RLPOLDCT did not match what had been specified on a previous lock or change request for this work unit.
	X'40'		The work unit does not hold the lock.
	X'20'		No lock exists for the specified resource hash and name values.
	X'10'		From-duration was specified on a change single request, but the from-duration did not match the held-duration for that lock. The lock is not altered.
	X'08'		The lock is not held in the state specified by 'fstate'.
	X'04'		The resource is not locked by the work unit in the specified class.
	X'02'		A suspended LOCK or CHANGE request exists against the lock. If ownership/duration change of a group of locks was requested, some locks might have changed before this condition was detected.
	X'01'		The target work unit (TWU) already holds a lock or is waiting for a lock on a resource for which this request is attempting to transfer lock ownership. Ownership/duration change of other locks specified by this request might have occurred before this condition was detected.
16 (X'10')	X'80'		An invalid 'tstate' was specified. The value is greater than 11.
	X'40'		The CLASS is invalid. The value is greater than 31.
	X'20'		The count-by-state lock has a valid 'tstate', but the 'fstate' is zero.
	X'10'		Both STATE and TWU were specified.
	X'08'		STATE was specified, but TOKEN and RNA were omitted.

Return Code	Reason Code Byte 1	Reason Code Byte 2	Description
	X'04'		The TOKEN is invalid. It cannot be resolved to a lock held by the specified owning work unit.
	X'02'		The resource name length is invalid. The length is less than 2 or greater than 32 bytes.
	X'01'		The 'fstate' is invalid for a count-by-state lock. The value is greater than 11.
20 (X'14')	N/A		IRLM services are not available.

QUERY Request

Return Code	Reason Code	Description
04 (X'04')	X'80'	There is no information meeting the criteria of the specified parameters.
	X'01'	The QUERY request did not specify an area large enough to contain all the data requested.
08 (X'08')	X'80'	A non-recoverable system error occurred while processing this request.
	X'01'	There is insufficient storage for the IRLM to process the QUERY request. After all other subsystems identified to the IRLM have quit, terminate the IRLM and increase the storage available to the IRLM before restarting it.
16 (X'10')	X'80'	The AREA address is invalid or zero.
	X'40'	An invalid continuation token was specified.
	X'08'	The AREA length is invalid. The AREA length is less than 4.
	X'04'	The TOKEN is invalid. The TOKEN value does not correspond to an existing lock, or the lock is not held by the designated work unit.
	X'02'	The resource name length is invalid. The length specified is less than 2 or greater than 32 bytes.
	X'01'	The DATA=RETAIN parameter is invalid. SCOPE=WU, OWU, or TOKEN was specified.
20 (X'14')	N/A	IRLM services are not available.

TAKEOVER Request

Return Code	Reason Code	Description
00	N/A	Takeover completed successfully for a DBMS that was identified either to this IRLM or to the IRLM in PTB communication with this IRLM. Restart locks might be requested.
04 (X'04')	X'80'	Takeover completed successfully for a DBMS that was not known to this IRLM.
	X'20'	Takeover completed successfully for a DBMS that was not known to this IRLM.
08 (X'08')	X'80'	A non-recoverable system error occurred while processing this request.
	X'01'	There is insufficient storage for the IRLM to process the TAKEOVER request. After all other subsystems identified to the IRLM have quit, terminate the IRLM and increase the storage available to the IRLM before restarting it.
12 (X'0C')	X'80'	The DBMS that issued the request was not identified as an alternate DBMS.
	X'40'	The DBMS being taken over identified itself as an alternate DBMS, or another DBMS already issued a takeover request.
	X'20'	The DBMS being taken over was not identified to either this IRLM or to any other IRLM that is participating in data sharing.
20 (X'14')	N/A	IRLM services are not available.

STAT Request

Return Code	Reason Code	Description
8 (X'08')	X'80'	A non-recoverable system error occurred while processing this request.

Return Code	Reason Code	Description
12 (X'0C')	X'80'	The SSNAME specified a subsystem not identified to this IRLM.
16 (X'10')	X'80'	The AREA address is invalid or zero.
	X'08'	The AREA length is invalid.
20 (X'14')	N/A	IRLM services are not available.

SYNC Request

Return Code	Reason Code	Description
08 (X'08')	X'80'	A non-recoverable system error occurred while processing this request.
	X'01'	There is insufficient storage for the IRLM to process the SYNC request. After all other subsystems identified to the IRLM have quit, terminate the IRLM and increase the storage available to the IRLM before restarting it.
12 (X'0C')	X'40'	CANCEL=YES was specified, but the work unit held no locks.
14 (X'0E')	X'10'	The work unit was not found.
20 (X'14')	N/A	IRLM services are not available.

PLEXIT Request

Return Code	Reason Code	Description
4 (X'04')	X'80'	The P-lock exit was already enabled.
	X'40'	The P-lock exit was already disabled.
8 (X'08')	X'80'	A non-recoverable system error occurred while processing this request.
	X'01'	There is insufficient storage for the IRLM to process the PLEXIT request. After all other subsystems identified to the IRLM have quit, terminate the IRLM and increase the storage available to the IRLM before restarting it.
12 (X'0C')	X'80'	The P-lock exit was not defined at IDENTIFY time.
20 (X'14')	N/A	IRLM services are not available.

Chapter 13. ELX Messages

In this section:

- "Introduction"
- "ELX0 Messages"
- "ELXC Messages" on page 462

Introduction

This topic describes the messages and return codes from Transport Manager Subsystem (TMS). When you issue a TMS command from the SYSIN data set, any messages are output to the SYSOUT data set. When you issue a TMS command from TSO, any messages are output to the z/OS console.

Information for each message includes the following:

Explanation: What the message means, why it appears, its cause, and what its variable fields represent.

System Action: What happened as a result of the condition that generated the message.

Programmer Response: The response you should make to the message, and the effect of your response on further processing.

Problem Determination: A list of steps you should perform to obtain data for the programming support personnel to use in their diagnostic efforts in case the problem recurs and you need the support personnel to diagnose the problem.

ELX0 Messages

ELX0001A *cccccccc* IS NOT A VALID COMMAND NAME

Explanation: A text string processed as a command began with *cccccccc* which is not a valid command name according to the subsystem's command table.

System Action: The text string is ignored.

System Operator Response: Review subsystem documentation for correct command names and re-enter the command.

Module: ELXKACMD

ELX0002A ENTRY POINT *eeeeeeee* OF COMMAND *cccccccc* COULD NOT BE FOUND.

Explanation: The dynamically loaded module *eeeeeeee* which supports command *cccccccc* could not be found by LINK.

System Action: The command request is ignored.

System Operator Response: Contact your system programmer. All libraries required for the subsystem might not be available; check the subsystem JCL.

Module: ELXKACMD

ELX0003A A SEVERE ERROR (RETURN CODE *nn nnn nnn*) ATTEMPTING TO LINK TO ENTRY POINT *eeeeeeee* FOR COMMAND *cccccccc*

Explanation: The dynamically loaded module *eeeeeeee* which supports command *cccccccc* could not be loaded by LINK. The failure, described by LINK return code *nn nnn nnn*, is other than "module not found".

System Action: The command request is ignored.

System Operator Response: Contact your systems programmer. Look up the return code from link and perform appropriate problem determination and correction.

Module: ELXKACMD

ELX0004A COMMAND *cccccccc* IS AMBIGUOUS

Explanation: The text string *cccccccc* is not long enough to select one command from the list of commands supported by the subsystem. For example, if the subsystem supports `STOP` and `START` commands, a command beginning with only `ST` would be ambiguous, the command would have to begin with at least three characters, `STO` or `STA`.

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System Action: The command request is ignored.

System Operator Response: Enter enough characters for the system to be able to select the desired command.

Module: ELXKACMD

ELX0005A COMMAND *cccccccc* ABENDED WITH CODE *hhh hhh*

Explanation: While processing command *cccccccc*, an abend (code *hhh hhh*) occurred.

System Action: The command fails to complete properly.

System Operator Response: Contact your system programmer. Using appropriate commands, attempt to determine what action was taken by the command before failure and then take appropriate action.

Module: ELXKACMD

ELX0100A COMMAND SYNTAX WAS INVALID. IKJPARS RC=*nnnn nnnn*

Explanation: The TSO IKJPARS macro has been invoked to parse the syntax of the input command and an error has been detected. The input command should be one of the following: `START`, `STOP`, `SET`, `DEFINE`, `DISPLAY`. *nnnn nnnn* is the error return code (refer to *TSO Guide to Writing a Terminal Monitor Program or Command Processor* GC28-1295).

System Action: The command is rejected.

System Operator Response: Check the command syntax and reenter the command.

Module: ELXCSTA0, ELXCSTO0, ELXCSET0, ELXCDEF0, ELXCDIS0

ELX0101W 'ALL' WAS SPECIFIED FOR START|STOP SYSTEM. LIST OF SYSTEM NAMES IGNORED

Explanation: The `ALL` keyword, as well as a list of subsystem names, has been specified in the input command; the system names list is ignored and the command operation is performed for all connected subsystems. Command could either be `START` or `STOP`.

System Action: The command is processed for `ALL` keyword.

Module: ELXCSTA0, ELXCSTO0

ELX0102W NO SYSTEMS HAVE BEEN DEFINED: START SYSTEM NOT DONE.

Explanation: When the `ALL` parameter is specified for a `START` command, the subsystem starts all Transport Managers connected to the subsystem under the condition that Transport Manager subsystem has been defined.

System Action: The command is rejected.

System Operator Response: Define transport manager subsystem (using `DEFINE` command) before entering `START` command.

Module: ELXCSTA0

ELX0103I *'cmd'* FOR ALL *'cmd'*ABLE SYSTEMS INITIATED.

Explanation: When the subsystem has been defined and the `ALL` keyword specified for the input command, the subsystem performs the specified action for the Transport Manager subsystem under the condition that TMS is in the right state. *cmd* could be either `START` or `STOP`.

System Action: The command is processed as requested.

Module: ELXCSTA0, ELXCSTO0

ELX0104A NO VALID OBJECTS FOR THE *'cmd'* COMMAND WERE FOUND

Explanation: There is no keyword for the input command. *cmd* could be either `START` or `STOP`.

System Action: The command is rejected.

System Operator Response: Check keyword for this command and reenter the command.

Module: ELXCSTA0, ELXCSTO0

ELX0105I SYSTEM *sssss* IS BEING *'cmd'*ED.

Explanation: The specified subsystem is performing the specified action. *sssss* is the subsystem name which you specified in the command line. Command could be `START` or `STOP`; '*cmd*'ed is either STARTED or STOPPED.

System Action: The command is processed as requested.

Module: ELXCSTA0, ELXCSTO0

ELX0106A SYSTEM *sssss* NOT *'cmd'*ED, IT IS NOT DEFINED

Explanation: The specified subsystem cannot perform the specified action because it has not yet been defined. *sssss* is the subsystem name specified in the command line. Command could be either `START` or `STOP`. '*cmd*'ed is either STARTED or STOPPED.

System Action: The command is rejected.

System Operator Response: Define the subsystem before entering the command.

Module: ELXCSTA0, ELXCSTO0

ELX0107I TMS NOT STARTED: ALREADY STARTED OR STARTING

Explanation: TMS start is not allowed when it has already performed the function or it is in the process of executing the command.

System Action: The command is rejected.

Module: ELXCSTA0

ELX0108I TMS IS BEING STARTED

Explanation: This is an informational message if TMS is performing the function specified in the command line.

System Action: The command is processed as requested.

Module: ELXCSTA0

ELX0109I *xxxx* NOT STARTED: TMS NOT STARTED OR STOPPING

Explanation: Transport Manager subsystem has to be started before *xxxx*. *xxxx* could be either SYSTEM or ILS keyword on the START command.

System Action: The command is rejected.

System Operator Response: Recheck the state of the transport manager subsystem.

Module: ELXCSTA0

ELX0111A NOTHING HAS BEEN SET

Explanation: This message indicates that no subsystem has been SET. There should be other error messages before this one. The error could be the keywords of SET command are not correct or there is a conflict with current subsystem state.

System Action: The command is rejected.

System Operator Response: Identify the error and reenter the command.

Module: ELXCSET0

ELX0112I SYSTEM *ssssss* RETRY IS STOPPED

Explanation: Conversation allocation retry is automatically initiated after a conversation is successfully established with the specified subsystem. You can stop a retry for a particular subsystem and the conversation allocation retry will be stopped for the specified subsystem. *ssssss* is the specified system name.

System Action: The command is processed as requested.

Module: ELXCSTO0

ELX0113A UNABLE TO SET APPLID|INSTANCE IN CURRENT SYSTEM STATE

Explanation: The keyword APPLID or INSTANCE of SET command cannot be set if Transport Manager subsystem has already requested start or started.

System Action: The command keyword is ignored.

System Operator Response: Recheck the state of the subsystem.

Module: ELXCSET0

ELX0114I *xxxxx* KEYWORD FOR TMS SET COMMAND HAS BEEN SET

Explanation: This is an informational message if one of the keywords of SET command has been set. *xxxxx* is one of APPLID, INSTANCE, PASSWORD, APPLCOUNT and TIMER.

System Action: The command is processed as requested.

Module: ELXCSET0

ELX0115I APPLCOUNT VALUE IS INVALID

Explanation: APPLCOUNT is the number of VTAM APPLIDs that are defined to VTAM for use by the Transport Manager subsystem. The number must exceed by at least 2 the maximum number of IMS subsystems ever expected concurrently to execute on this CPC.

System Action: The command is rejected.

System Operator Response: Check the value of APPLCOUNT and reenter the command.

Module: ELXCSET0

ELX0116A APPLID INVALID, MATCHES A SYSTEM NAME

Explanation: APPLID is matched with the remote transport manager subsystem name. APPLID is a one-to five-character name which consists of the first portion of the series of VTAM APPLIDs used by Transport Manager and related IMS subsystems. This keyword is rejected if Transport Manager subsystem is connected to VTAM.

System Action: The command is rejected.

System Operator Response: Check the name of APPLID and reenter the command.

Module: ELXCSET0

ELX0118A *ssssssss* IS ALREADY DEFINED AS LOCAL|REMOTE TMS

Explanation: The system *ssssssss* has been already defined as either local TMS or remote TMS.

A subsystem name that matches the APPLID of this transport manager results in a message such that *ssssssss* IS ALREADY DEFINED AS LOCAL TMS.

A duplicate subsystem name specified with DEFINE command results in a message such that *ssssssss* IS ALREADY DEFINE AS A REMOTE TMS.

System Action: Processing of other subsystem names continues.

Module: ELXCDEF0

ELX0119I TMS DEFINE COMMAND FAILED

Explanation: No subsystems were defined during the process of the DEFINE command. This message is issued in the following possible circumstances:

- No subsystem name has been entered with DEFINE command.
- All the subsystem names entered with DEFINE command are already defined as LOCAL, that is they match the APPLIDs of this transport manager.

System Action: The command is rejected.

Module: ELXCDEF0

ELX0120I SYSTEM *ssssssss* HAS BEEN DEFINED

Explanation: Each time a subsystem is defined during the process of DEFINE command, this informational message is issued.

System Action: Processing of other subsystem names continues.

Module: ELXCDEF0

ELX0122I SYSTEM *sssss* NOT STARTED DUE TO STATE: *yyyy*

Explanation: *sssss* is the specified subsystem name. *yyyy* could be RSTA (start requested), STA (started), RSTO (stop requested) or STO (stopped). The subsystem will not perform the specified function if the subsystem is not in the proper state.

System Action: The command is rejected.

System Operator Response: Check the subsystem state and reenter the command.

Module: ELXCSTA0

ELX0128I TMS NOT STOPPED: ALREADY STOPPED OR IS STOPPING

ELX0128I TMS NOT STOPPED: TMS STARTING IS IN PROGRESS

Explanation: TMS stop is not allowed when it has already performed the function or it is in the process of executing the command.

System Action: The command is rejected.

Module: ELXCSTO0

ELX0129I TMS IS BEING STOPPED

Explanation: This is an informational message if TMS is performing the function specified in the command line.

System Action: The command is processed as requested.

Module: ELXCSTO0

ELX0130I SYSTEM *sssss* NOT STOPPED DUE TO STATE: *yyyy*

Explanation: *sssss* is the specified subsystem name. *yyyy* could be RSTA (start requested), STA (started), RSTO (stop requested) or STO (stopped). The subsystem will not perform the specified function if the subsystem is not in the proper state.

System Action: The command is rejected.

System Operator Response: Check the subsystem state and reenter the command.

Module: ELXCSTO0

ELX0150I STOP RETRY SYSTEM *ssssssss* CAN NOT BE PERFORMED, IT IS NOT DEFINED

Explanation: A remote system has to be defined before you can stop a conversation retry.

System Action: The command is rejected.

System Operator Response: Define remote system before issuing this command.

Module: ELXCSTO0

ELX0170I TRANSPORT MANAGER DISPLAY: *dd.dddtt.tt.tt.t*

Explanation: This informational message is issued after the validity of the DISPLAY command line is confirmed, and shows the date *dd.ddd* and time *tt.tt.tt.t* of the display. After this message, the output of DISPLAY command follows.

System Action: Processing of other keywords continues.

Module: ELXCDIS0

ELX0171A NO VALID OBJECTS FOR THE TMS DISPLAY COMMAND WERE FOUND

Explanation: The DISPLAY command has been entered without any object keywords.

System Action: The command is rejected.

System Operator Response: Reenter the command with the appropriate object keywords.

Module: ELXCDIS0

ELX0181A TMS ALLOCATE FAILURE FOR SYSTEM *sid*. R15=*aa* R0=*bb*

Explanation: An attempt by the transport manager subsystem (TMS) to allocate a conversation to a remote system failed with return code *aa* in R15 and *bb* in R0. The low order byte of the register 15 and register 0 values returned by ALLOC request are shown in hexadecimal format. The system name is specified by *sid*.

System Action: No conversation is established.

System Operator Response: Check the return code of the transport manager ALLOC request, the transport manager input on SET, DEFINE, or START command, and VTAM GEN definitions.

Module: ELXTI100

ELX0183A TMS ACCEPT FAILURE FOR SYSTEM *sid*. R15=*aa* R0=*bb*

Explanation: An attempt by the transport manager subsystem (TMS) to accept a conversation from a remote system failed with return code *aa* in R15 and *bb* in R0. The low order byte of the register 15 and register 0 values returned by ACCEPT request are shown in hexadecimal format. The system name is specified by *sid*.

System Action: No conversation is established.

System Operator Response: Check the return code of the transport manager ACCEPT request, the transport manager input on SET, DEFINE, or START command, and VTAM GEN definitions.

Module: ELXTI100

ELX0184I TMS ALLOCATE REQUEST FROM APPLID *applid* REJECTED: *text*

Explanation: Either the *applid* is not defined to this TMS, or the requested TMS is not started. The content of *text* is either NO LOCAL DEFINITION, or SYSTEM NOT STARTED.

System Action: No conversation is established.

System Operator Response: Use a TMS DEFINE or START command to allow communication with the requesting TMS.

Module: ELXTITX0

ELX0185I TMS ACCEPT FAILED FOR SYSTEM *sid* REASON: *rr*

ELX0185I TMS ALLOCATE FAILED FOR SYSTEM *sid* REASON: *rr*

Explanation: The transport manager asynchronous event, STATUS exit, driven by ACCEPT or ALLOCATE request, fails with reason code *rr*. The system name is specified by *sid*. code.

System Action: No conversation is established.

System Operator Response: Notify the system programmer. Check the return code of STATUS exit, the transport manager input on SET, DEFINE, or START command, and VTAM GEN definitions.

Module: ELXTI100

ELX0187I TMS CONVERSATION TO TMS ON SYSTEM *sid* CONNECTED

Explanation: The message shows the status of the transport manager interface to another transport manager. The system name is specified by *sid*. This message implies that the conversation is allocated between the two transport managers.

System Action: Processing continues.

Module: ELXTI100

ELX0188I TMS CONVERSATION TO TMS ON SYSTEM *sid* DISCONNECTED

Explanation: The message shows the status of the transport manager interface to another transport manager. The system name is specified by *sid*. This message implies that the conversation is deallocated between the two transport managers.

System Action: Processing continues.

Module: ELXTI100

ELX0189I TMS CONVERSATION TO TMS ON SYSTEM *sid* STOPPED

Explanation: The message shows the status of the transport manager interface to another transport manager. The system name is specified by *sid*. This message implies that there is no conversation between the two transport managers.

System Action: Processing continues.

Module: ELXTI100

ELX0200I TMUSER *ssid*: ACB OPEN FAILED, ERROR CODE=*aa* APPLID *applid*

Explanation: Transport manager issued a VTAM OPEN ACB request, which failed with error code *aa* for APPLID *applid*. The hexadecimal value error code *aa* can be found as ACBERFLG in the ACB DSECT (IFGACB). The subsystem *ssid* can either be the transport manager jobname, IMS online system ID, or the batch jobname.

The most probable cause of this message is that VTAM cannot find the applid from the APPL definition, or an incorrect VTAM LIST was used.

System Action: VTAM OPEN ACB is rejected for the transport manager IDENTIFY request.

System Operator Response: Refer to *VTAM Programming* for the meaning of ACBERFLG. Also check the transport manager input and VTAM GEN definitions.

Module: ELXUTM00, ELXUIID0

ELX0201W TMUSER *ssid*: APPLID *applid* BUSY, CANNOT BE USED

Explanation: As a result of an IDENTIFY request by a subsystem *ssid*, a VTAM application identifier *applid*, defined as available to transport manager, was used in an OPEN ACB request. The OPEN failed with return code ACBOPAA indicating that the *applid* was already in use or had been opened for use already. The subsystem *ssid* can either be the transport manager jobname, IMS online system ID, or the batch jobname.

System Action: The listed *applid* is marked as not available and transport manager attempts to use another name. This can reduce the number of available names to such a point that can cause operational problems.

System Operator Response: Use a D NET,ID=applid command to determine which job or task is using the *applid*.

The most probable cause of this message is that the *applid* is in use by another copy of transport manager or a user of another copy of transport manager. A user might still be using an applid even though the transport manager job it was dealing with has terminated. Having two active copies of transport manager using the same APPLID at the same time is a procedural error.

Another possible cause is a definitional error where the same *applid* is being used by two different programs. In this case, notify your system programmer.

Module: ELXUTM00, ELXUIID0

ELX0202I TMUSER *ssid*: VTAM *function* ERROR, R15=*aa* R0=*bb* RTNCD=*cc* FDBK2=*dd*

Explanation: Transport manager issued an asynchronous VTAM SETLOGON request which failed due to a VTAM RPL error. The low order byte of the register 15 and register 0 values returned by SETLOGON request are shown in hexadecimal format by *aa* and *bb* respectively. The VTAM RPLRTNCD and RPLFDB2 values are shown in hexadecimal format by *cc* and *dd*. The subsystem *ssid* can either be the transport manager jobname, IMS online system ID, or the batch jobname.

System Action: The transport manager IDENTIFY request fails.

System Operator Response: Refer to *VTAM Programming*, or *VTAM Programming for LU6.2* for the meaning of RTNCD and FDBK2.

Module: ELXUTM00, ELXUIID0

ELX0203W TMUSER *ssid*: VTAM *function* ERROR: RTNCD=*cc* FDBK2=*dd*

Explanation: Transport manager detected an error on STATUS exit due to invalid VTAM RPL return code. The VTAM RPLRTNCD and RPLFDB2 values are shown in hexadecimal format by *cc* and *dd*. The subsystem *ssid* can either be the transport manager jobname, IMS online system ID, or the batch jobname.

System Action: The transport manager IDENTIFY request fails.

System Operator Response: Refer to *VTAM Programming*, or *VTAM Programming for LU6.2* for the meaning of RTNCD and FDBK2.

Module: ELXUTM00, ELXUVXS0

ELX0204I TMUSER *ssid*: APPCCMD *cmdqual* R15=*aa* R0=*bb* RTNCD=*cc* FDBK2=*dd* RCPRI=*eeee* RCSEC=*ffff*

Explanation: An unexpected VTAM APPC status was synchronously returned from the execution of an APPCCMD macro. The subsystem being serviced at the time of error is identified by *ssid*. This subsystem can either be the transport manager jobname, IMS online system ID, or the batch jobname. The actual APPCCMD CONTROL= specification is identified by *cmd*. The actual APPCCMD QUALIFY= specification is identified by *qual*. The low order byte of the register 15 and register 0 values returned by APPCCMD are shown in hexadecimal format by *aa* and *bb* respectively. The VTAM RPLRTNCD, RPLFDB2, RPL6RCPR and RPL6RCSC values are shown in hexadecimal format by *cc*, *dd*, *eeee*, and *ffff*.

System Action: An error status is passed to the component (represented by *ssid*) using Transport Manager services.

System Operator Response: If the component using transport manager indicates an operational problem, the information in this message might be useful in diagnosing problems.

Module: ELXUTM00

ELX0205I TMUSER *ssid*: APPCCMD *cmdqual* RTNCD=*cc* FDBK2=*dd* RCPRI=*eeee* RCSEC=*ffff* SENSE=*gggggggg*

Explanation: An unexpected VTAM APPC status was found at the completion of a request initiated by an APPCCMD macro. The subsystem being serviced at the time of error is identified by *ssid*. This subsystem can either be the transport manager jobname, IMS online system ID, or the batch jobname. The actual APPCCMD `CONTROL=` specification is identified by *cmd*. The actual APPCCMD `QUALIFY=` specification is identified by *qual*. The VTAM RPLRTNCD, RPLFDB2, RPL6RCPR and RPL6RCSC values are shown in hexadecimal format by *cc*, *dd*, *eeee*, and *ffff*.

System Action: An error status is passed to the component (represented by *ssid*) using Transport Manager services.

System Operator Response: If the component using transport manager indicates an operational problem, the information in this message might be useful in diagnosing problems.

Module: ELXUTM00

ELX0209I TMUSER *ssid*: VTAM STORAGE SHORTAGE, SEND FAILED

Explanation: VTAM returned a RPL6RCPRI value of X'0098' indicating “Temporary storage shortage during processing of send”. The subsystem *ssid* can either be the transport manager jobname, IMS online system ID, or the batch jobname.

System Action: The conversation is deallocated.

System Operator Response: Contact your system programmer. This error normally results when the VTAM IOBUF pool is too small for the workload.

Module: ELXUTM00

ELX0210A TMS IDENTIFY FAILED, RC=*nn* (*nn text*) REASON=*rrr* (*rrr text*).

Explanation: Transport Manager IDENTIFY process fails with return code *nn*, reason code *rrr*. code.

System Action: The `START TMS` command fails.

System Operator Response: Check the transport manager on `SET`, `DEFINE`, or `START` command, and VTAM GEN definitions.

Module: ELXITM00

ELX0211I TMS *version* STARTED

Explanation: Transport Manager is started with the version number specified by version.

System Action: Processing continues.

Module: ELXITM00

ELX0212A TMS IDENTIFY ASYNCH FAILURE *aa*

Explanation: The transport manager asynchronous event, STATUS exit, driven by IDENTIFY request fails. The STATUS exit reason code is specified as *aa*. code.

System Action: The `START TMS` command fails.

System Operator Response: Notify the system programmer. Check the reason code of STATUS exit, the transport manager input, and VTAM GEN definitions. Correct the problem and issue `START TMS`.

Module: ELXITM00

ELX0213A REQUESTED VTAM APPLID *applid* IS BUSY, TMS START FAILED

Explanation: Transport manager attempted to use the first VTAM application identifier assigned to it by the `SET` command, *applid*. The *applid* was not available but transport manager requires it to complete initialization. Refer to message `ELX0201W` for additional information.

System Action: The internal initialization of transport manager fails to complete.

System Operator Response: Note that this situation is probably caused by a definitional or operational error. Identify the job or task using the specified applid using the VTAM command `D NET,ID=applid` and take appropriate action to free up the *applid*. Once the *applid* is available, issue a transport manager `START TMS` command.

Module: ELXITM00

ELX600A TMSS (ELXKSTAR) IS NOT AUTHORIZED

Explanation: While processing TMS procedure with `PARM='ELX'` on the `EXEC` statement, the module ELXKSTAR is not authorized by z/OS system. Abend `3430` is issued.

System Action: The procedure of TMS is abended.

System Operator Response: Contact your system programmer to authorize the ELXKSTAR.

Module: ELXKSTAR

ELX1001E TRANSPORT MANAGER SUBSYSTEM NOT FOUND. FORMATTING TERMINATES.

Explanation: No transport manager was found in the dump matching the name specified on the SYSTEM verb exit parameter.

System Action: The dump formatter terminates.

System Operator Response: Invoke the formatter verb exit again with the correct SYSTEM parameter. Be sure to specify exactly four characters, which might require padding the subsystem name with blanks. The IPCS SUMM JOBS command can help identify the transport manager subsystem name.

Module: ELXACTL0

ELX1002I SUBSYSTEM *ssss* WILL BE FORMATTED AS TRANSPORT MANAGER.

Explanation: The SYSTEM parameter was not specified on the dump formatter invocation to select a particular transport manager subsystem. However, the formatter found a subsystem that appears to be a transport manager, and attempts to format that subsystem.

System Action: The dump formatter searches all subsystems in the dump and formats the first one that appears to be a transport manager.

System Operator Response: If the subsystem chosen by the formatter is incorrect, invoke the dump formatter again specifying the correct 4-letter subsystem name with the verb exit parameter SYSTEM.

Module: ELXACTL0

ELX1003W FORMATTER VERSION *xxxxxxxx* DOES NOT MATCH DUMPED TMS VERSION *yyyyyyyy*. FORMATTING CONTINUES.

Explanation: The dump formatter is not at the same release level as the transport manager system being formatted. This can lead to invalid output data and error messages issued by the formatter due to inconsistent control block mappings.

System Action: Formatting continues.

System Operator Response: Use a version of the dump formatter consistent with the release level of the transport manager as indicated by *yyyyyyyy*.

Module: ELXACTL0

ELX1004W STORAGE OBTAIN FOR *xxxxxxxx* BYTES FAILED WITH RC=*nnnnnnnn*

Explanation: A STORAGE OBTAIN request issued by the dump formatter failed with the indicated return code.

If the formatter appears to be in a loop, a control block chain that it is attempting to follow might be chained in a loop. If no loop is apparent, the problem might be insufficient working storage.

System Action: The dump formatter skips formatting that depends on data in the storage block.

System Operator Response: Increase your region size to give the formatter more working storage.

Module: ELXACCSI

ELX1005W DUMP STORAGE AT ADDRESS *aaaaaaaa* FOR *xxxxxxxx* BYTES IS UNAVAILABLE

Explanation: The specified storage block was not found in the dump.

Some or all of the referenced storage was not dumped. Possibly an incorrect pointer led the dump formatter to retrieve invalid storage.

System Action: The dump formatter skips formatting that depends on data in the storage block.

Module: ELXACCSI

ELX1010I INTERNAL ABEND DETECTED, FORMATTING TERMINATES.

Explanation: The dump formatter experienced a fatal internal error.

System Action: Formatting terminates.

Module: ELXASTA0

ELXC Messages

ELXC106I THE REQUEST IS ENDED WITHOUT ERROR

Explanation: This is an informational message for the requestor to indicate the request is completed without error. For the command request, this message is suppressed.

System Action: The ELXKCRQM continues to process the request blocks on the queue.

Module: ELXKCRQM

ELXC109I THE REQUEST IS TERMINATED WITH ERROR

Explanation: This is an informational message for the requestor to indicate the request is completed with an error. For the command request, this message is suppressed.

System Action: The ELXKCRQM continues to

process the request blocks on the queue.

System Operator Response: Contact your system programmer to find the requestor.

Module: ELXKCRQM

ELXC112A UNABLE TO OBTAIN STORAGE FOR REQWORK AREA

Explanation: While processing the request, the ELXKCRQH issues GETMAIN to get a request work area and GETMAIN returns nonzero return code.

System Action: The command is not processed.

System Operator Response: Contact your system programmer to analyze the problems and increase the region size.

Module: ELXKCRQH

ELXC160I THE FOLLOWING INPUT FROM SYSIN USED IN REPLY:

Explanation: This is an informational message which indicates the input from the SYSIN data set is used for a reply.

System Action: The ELXKCSYS puts this message and the input request in the SYSOUT data set.

Module: ELXKCSYS

ELXC161I THE FOLLOWING SYSIN REQUEST QUEUED FOR PROCESSING

Explanation: This is an informational message which indicates the input from the SYSIN data set is queued for processing.

System Action: The ELXKCSYS puts this message and the input request in the SYSOUT data set.

Module: ELXKCSYS

ELXC162A REPLY REQUIRED BUT EODAD/SYNAD ON SYSIN

Explanation: This is an informational message which indicates the input from SYSIN is queued for processing. This can only occur with the test tool (when the TMS subsystem is tailored with “CLIST” code).

System Action: The ELXKCSYS puts this message and the input request in the SYSOUT data set.

Module: ELXKCSYS

ELXC181I OS CONSOLE STASK IS STOPPED,STOP REQ IGNORED

Explanation: While processing the input from MODIFY command, the ELXKCOSM detected that the console task which is running under the TMS dispatcher is stopped.

System Action: The ELXKCOSM ignores all inputs from the MODIFY command and returns control to the TMS dispatcher.

System Operator Response: Contact your system programmer.

Module: ELXKCOSM

ELXC315I MAIN TASK ACTIVE:
mmmmmmmmddddddddpppppppp

Explanation: During ESTAE processing, if the module ID is available, the TMS dispatcher ESTAE issues this message to inform you of the last module logically active.

- *mmmmmmmm* is the module name
- *dddddddd* is the date with the format mm/dd/yy
- *pppppppp* is the PTF number or blank

System Action: If the TMS is not canceled by the operator without the dump option (abend 0222), the TMS is abended with an SDUMP.

System Operator Response: Contact your system programmer. Using the appropriate abend code, attempt to determine what action was taken by the abend before failure and then take appropriate action.

Module: ELXKCDSP

Chapter 14. Dynamic Allocation (IMSDALOC) Messages

This section lists the messages associated with the DFSMDA macro, which is used to create a parameter list in SDFSRESL for the databases which are to be dynamically allocated.

The messages in this section have the prefix MDA. Because the parameter list creation involves the use of assembler language macro instructions, invalid keyword parameters can also result in error messages from the assembler program.

In addition to the system action specified in this section for each message, the following system action is also taken unless explicitly excepted:

System Action (general):
The remaining DFSMDA macro statements are checked for validity and the parameter list is not created if the system encounters an error.

MDA001 TYPE=operand INVALID

Explanation: This is not a valid operand for type.

System Action: The other statements are checked for validity.

Programmer Response: Correct the errors, and rerun the job.

MDA005 MONITOR CANNOT BE SPECIFIED MORE THAN ONCE

Explanation: Self-explanatory.

System Action: The other statements are checked for validity.

Programmer Response: Correct the errors, and rerun the job.

MDA010 TYPE=FINAL CANNOT BE SPECIFIED MORE THAN ONCE

Explanation: Self-explanatory.

System Action: The other statements are checked for validity.

Programmer Response: Correct the errors, and rerun the job.

MDA012 TYPE=operand CANNOT BE SPECIFIED BEFORE TYPE=INITIAL

Explanation: Self-explanatory.

System Action: The other statements are checked for validity.

Programmer Response: Correct the errors, and rerun the job.

MDA013 TYPE=INITIAL MUST BE SPECIFIED FIRST

Explanation: Self-explanatory.

System Action: The other statements are checked for validity.

Programmer Response: Correct the errors, and rerun the job.

MDA014 NO PARAMETERS SPECIFIED PRIOR TO TYPE=FINAL

Explanation: Self-explanatory.

System Action: The other statements are checked for validity.

Programmer Response: Correct the errors, and rerun the job.

MDA015 NO PARAMETERS ACCEPTED AFTER TYPE=FINAL

Explanation: Self-explanatory.

System Action: The other parameters are checked for validity.

Programmer Response: Correct the errors, and rerun the job.

MDA017 DBNAME REQUIRED

Explanation: The database name is required for TYPE=DATABASE

System Action: The other parameters are checked for validity.

Programmer Response: Correct the errors, and rerun the job.

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MDA018 DBNAME CANNOT EXCEED 8 CHARACTERS

Explanation: Self-explanatory.

System Action: The other parameters are checked for validity.

Programmer Response: Correct the errors, and rerun the job.

MDA019 DDNAME REQUIRED FOR TYPE=DATASET

Explanation: Self-explanatory.

System Action: The other parameters are checked for validity.

Programmer Response: Correct the errors, and rerun the job.

MDA020 DSNAME REQUIRED FOR TYPE=DATASET

Explanation: Self-explanatory.

System Action: The other parameters are checked for validity.

Programmer Response: Correct the errors, and rerun the job.

MDA021 DISP=OLD DEFAULTED

Explanation: This is a warning message.

System Action: DISP=OLD is defaulted.

Programmer Response: None.

MDA022 DISP=operand IS INVALID

Explanation: This is a warning message.

System Action: DISP=OLD is defaulted.

Programmer Response: None.

MDA023 INDEX PARAMETER IGNORED

Explanation: Index is no longer supported.

System Action: Parameter is ignored.

Programmer Response: None.

MDA025 DDNAME CANNOT EXCEED 8 CHARACTERS

Explanation: Self-explanatory.

System Action: The other parameters are checked for validity.

Programmer Response: Correct the errors, and rerun the job.

MDA026 DSNAME CANNOT EXCEED 44 CHARACTERS

Explanation: Self-explanatory.

System Action: The other parameters are checked for validity.

Programmer Response: Correct the errors, and rerun the job.

MDA027 DDNAME DEFAULTED TO IMSMON

Explanation: For DC monitor the DDNAME must be IMSMON.

System Action: This is a warning message, and DDNAME is defaulted to IMSMON.

MDA028 DDNAME=operand INVALID FOR TYPE=DCMONITOR DDNAME=IMSMON ASSUMED

Explanation: Self-explanatory.

System Action: This is a warning message, and DDNAME is defaulted to IMSMON.

Programmer Response: None.

MDA29 DBNAME MUST NOT START WITH CHARACTERS DFS

Explanation: Self-explanatory.

System Action: The other parameters are checked for validity.

Programmer Response: Correct the errors, and rerun the job.

MDA030 MAXIMUM NUMBER OF DATA BASES EXCEEDED. LIMIT IS 250

Explanation: Self-explanatory.

System Action: The other parameters are checked for validity.

Programmer Response: Divide the job in two or more jobs, and rerun these jobs.

MDA031 UNIT DEFAULTED TO TAPE

Explanation: Self-explanatory.

System Action: This is a warning message, unit is defaulted to tape.

Programmer Response: None.

MDA032 UNITNAME MUST NOT EXCEED 8 CHARACTERS

Explanation: Self-explanatory.

System Action: The other parameters are checked for validity.

Programmer Response: Correct the errors, and rerun the job.

MDA033 NO DATA SET SPECIFIED FOR PREVIOUS DATA BASE

Explanation: Self-explanatory.

System Action: The other parameters are checked for validity.

Programmer Response: Correct the errors, and rerun the job.

MDA034 NO DATABASE SPECIFIED FOR THIS DATA SET

Explanation: Self-explanatory.

System Action: The other parameters are checked for validity.

Programmer Response: Correct the errors, and rerun the job.

MDA035 UNITNAME IS IGNORED FOR DATA BASE

Explanation: This is a warning message.

System Action: The parameter is ignored.

Programmer Response: None.

MDA036 DBNAME IGNORED FOR FP DATA BASE

Explanation: This is a warning message.

System Action: The parameter is ignored.

Programmer Response: None.

MDA037 NO SPECIAL CHARACTERS ALLOWED

Explanation: Self-explanatory.

Programmer Response: Correct the errors, and rerun the job.

MDA038 NO DATA SET SPECIFIED FOR PREVIOUS DB

Explanation: Self-explanatory

System Action: The other parameters are checked for validity.

Programmer Response: Correct the errors, and rerun the job.

MDA039 NO DATA SET SPECIFIED FOR PREVIOUS DB.

Explanation: Self-explanatory

System Action: The other parameters are checked for validity.

Chapter 15. Database Description Generation (DBDGEN) Messages

This section lists the messages displayed for DBD generation error conditions.

The DBDGEN messages appear alphanumerical in this section. The approximate order in which they would occur during a DBD generation and the issuing module are as follows:

Message Prefix (Order)	Principal Issuing Macros
DBD	DBD
DMAN	DATASET,DMAN
AREA	AREA
SEGM	SEGM
SOUR	SEGM
FLD	FIELD,FLD,FLDK
LCHD	LCHILD
EXT	LCHILD,DBDGEN
XDFLD	XDFLD
DGEN	DBDGEN

Because DBD generation is composed of the operating system assembler language macro instructions, omission of or an invalid sequence in DBD control statements or invalid keyword parameters also result in error statements from the operating system assembler. In addition to the system action specified in this section for each of these messages (except where explicitly noted otherwise), the remaining DBDGEN statements are checked for validity based on available information. The DBD generation is terminated prior to macro expansion.

AREAnnn Messages

AREA100 AREA STMT IS INVALID FOR ACCESS=access DBDS.

Explanation: The ACCESS= operand contains a value other than DEDB or the AREA statement was used incorrectly.

System Action: The system ignores all operands specified on the AREA statement and continues to process the remaining statements.

Programmer Response: Correct the ACCESS operand on the DBD statement or change the AREA statement to a DATASET statement. Rerun the DBDGEN.

AREA120 AREA SPECIFICATION LIMIT EXCEEDED.

Explanation: There are more AREA statements than are permissible for a DBDGEN with ACCESS=DEDB. The valid number of AREA statements is less than or equal to 2048.

System Action: The first 10 areas are entered in order, and any succeeding AREA statements are ignored.

Programmer Response: Reduce the number of AREA statements to less than or equal to 2048 and rerun the DBDGEN.

AREA140 MODEL OPERAND SPECIFICATION IS INVALID

Explanation: The MODEL operand does not specify one of the following valid values:

For DEVICE=2305, model=1 or 2 is allowed.

For DEVICE=3330, model=1 or 11 is allowed.

For DEVICE=2314, 2319, 3340 and 3350, no MODEL operand specification is allowed.

System Action: Terminate the DBDGEN prior to expansion.

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Programmer Response: Correct the MODEL operand and rerun DBDGEN.

DB Dnnn Messages

DBD001 DBD CARD MUST OCCUR 1ST IN A DBDGEN

Explanation: The first entry to a DBDGEN must be a DBD statement. It is necessary to first know the DL/I organization of the database and its name before DBDGEN can function.

System Action: The results obtained from the scan of the succeeding statements are very unpredictable.

Programmer Response: Provide a DBD statement as the first entry to DBDGEN, and rerun DBDGEN.

DBD100 MORE THAN ONE DBD CARD SPECIFIED

Explanation: Only one DBD statement is acceptable for each database.

System Action: The parameters on the second DBD statement overlay the parameters on the first DBD statement. Results are unpredictable.

Programmer Response: Remove excess DBD statements, and rerun DBDGEN.

DBD110 NAME OPERAND IS OMITTED OR INVALID

Explanation: One of the following occurred:

- The NAME operand was omitted.
- The NAME operand specifies a database name which is longer than 8 characters, which equals the reserved name of RDMVTAB, or whose first character is not alphabetic, #, @ or $, or whose remaining characters are not alphabetic, numeric, #, @ or $.
- The NAME operand specifies multiple database names, but the ACCESS is not INDEX, or the ACCESS=INDEX, but the maximum number of database names has been exceeded or there is a duplicate in the list.

System Action: No default is assumed. The specified names are used for subsequent validity checking.

Programmer Response: Correct the NAME operand and rerun DBDGEN.

DBD113 PASSWD=value OPERAND IS INVALID

Explanation: An invalid password operand value was specified. The valid operand values are PASSWD=YES and PASSWD=NO.

System Action: PASSWD=NO is assumed for subsequent validity checking.

Programmer Response: Correct the PASSWD operand and rerun DBDGEN.

DBD118 PASSWD OPERAND IS INVALID WITH ACCESS=access

Explanation: PASSWD=YES was specified with a DL/I access method other than HISAM, SHISAM, HDAM, HIDAM, INDEX, GSAM, PHDAM, PHIDAM, or PSINDEX. For a LOGICAL database, the password operand must be specified on the physical database descriptions, if password processing is desired.

System Action: PASSWD=NO is assumed for subsequent validity checking.

Programmer Response: Correct the error and rerun DBDGEN.

DBD119 PASSWD OPERAND MAY ONLY BE SPECIFIED IF VSAM IS THE SYSTEM ACCESS METHOD

Explanation: PASSWD=YES was specified, but VSAM was not specified as the system access method.

System Action: PASSWD=NO is assumed for subsequent validity checking.

Programmer Response: Correct the error and rerun DBDGEN.

DBD120 ACCESS OPERAND IS OMITTED OR INVALID

Explanation: One of the following occurred:

- The ACCESS operand was omitted.
- The DL/I access method or the operating system access method is not one of the valid types or combinations listed.
- The ACCESS operand did not specify INDEX and contains more than two parameter values or did specify INDEX and contains more than four parameter values.
- The ACCESS operand specified the PROT or DOSCOMP option without VSAM, or the third parameter value was specified, but was not PROT or NOPROT, or the fourth parameter value was specified, but was not DOSCOMP.

This error should be corrected before attempting to determine the validity of any following error messages, if any were generated.

System Action: No default is assumed. This error must be corrected to obtain a meaningful scan of the succeeding parameters.

Programmer Response: Correct the ACCESS operand and rerun DBDGEN.

DBD130 RMNAME OPERAND IS OMITTED OR INVALID

Explanation: One of the following occurred:

- The RMNAME operand was specified for a DL/I access method other than HDAM, DEDB, or PHDAM.
- For HDAM or PHDAM, the RMNAME operand was omitted, or was specified, but the randomizing module name was omitted or it consists of more than 8 characters, or has invalid character content. Or, the RMNAME operand contains more than four parameters or one of the last three parameter values is not self-defining and is below the lower allowable limit, or above the upper allowable limit.
- For DEDB, the RMNAME randomizing module name was omitted and it consists of more than 8 characters, or has invalid character content. Or the RMNAME operand consists of more than just the single randomizing module name.

System Action: A combination of default values and user information is used for subsequent validity checking.

Programmer Response: Correct the RMNAME operand, and rerun DBDGEN.

DBD131 RBN OPERAND MUST BE SPECIFIED

Explanation: The RBN operand must be specified when using randomizing module names DFSHDC10 or DFSHDC40.

System Action: Errors in the DBD terminate the DBDGEN.

Programmer Response: Correct the RBN operand, and rerun DBDGEN.

DBD140 A SHARED SECONDARY INDEX REQUIRES VSAM AS THE SYSTEM ACCESS METHOD

Explanation: Multiple database names were specified in the NAME operand with ACCESS=INDEX, but the system access method specified was not VSAM.

System Action: The given information is used for subsequent validity checking.

Programmer Response: Correct the inconsistent operand information, and rerun DBDGEN.

DBD150 ISAM ACCESS METHOD IS NO LONGER SUPPORTED

Explanation: ACCESS=(xxxx,ISAM) was specified in the DBDGEN. The ISAM access method is not supported under IMS.

System Action: The system continues checking the validity of the remaining parameters in the DBDGEN.

Programmer Response: Correct the ACCESS= operand and rerun DBDGEN.

DBD160 PSNAME OPERAND IS INVALID.

Explanation: The PSNAME operand violates the rules for a name. The operand:

- Cannot be longer than 8 characters
- The first character must be alphabetic
- The remaining characters must be alphabetic, numeric, or #, @, $

System Action: DBDGEN terminates. Subsequent statement validation continues.

Programmer Response: Correct the PSNAME specification and reprocess the DBDGEN.

DBD170 PSNAME OPERAND IS INVALID WITH ACCESS=

Explanation: The PSNAME operand is only valid for ACCESS=PHDAM, PHIDAM, or PSINDEX.

System Action: DBDGEN terminates. Subsequent statement validation continues.

Programmer Response: Remove the PSNAME operand or change the ACCESS parameter to one of the allowed organizations.

DBD300 PASSWD OPERAND IS INAPPLICABLE TO ACCESS={MSDB|DEDB}

Explanation: The PASSWD operand is invalid for a DBDGEN with ACCESS=MSDB or ACCESS=DEDB specified on the DBD statement.

System Action: The system continues to process the parameter on the DBD statement and the remaining statements.

Programmer Response: Remove the PASSWD parameter from the DBD statement and rerun the DBDGEN, or ignore the warning message.

DBD700 xxxxxxxx IGNORED FOR EXIT yyyyyyyy BECAUSE zzzzzzzz ALREADY SPECIFIED

Explanation: Exit option xxxxxxxx was specified on the DBD statement for exit yyyyyyyy, but the option is ignored because the zzzzzzzz option is contradictory. The zzzzzzz option is used.

System Action: Processing continues with RC=4.

Programmer Response: Correct the EXIT specification on the DBD statement.

Problem Determination: 2, 3, 8 and 18.

DBD750 EXIT NOT SUPPORTED FOR DB ORGANIZATION. HDAM, HIDAM, DEDB, HISAM, OR SHISAM DATA BASE ORGANIZATION IS REQUIRED

Explanation: An EXIT= parameter was specified on the DBD statement for a database organization that is not supported.

System Action: Processing terminates with RC=8.

Programmer Response: Correct the EXIT specification on the DBD statement.

Problem Determination: 2, 3, 8 and 18.

DBD755 EXIT NAME xxxxxx IS INVALID

Explanation: An EXIT= parameter was specified on the DBD statement with the exit name positional parameter xxxxxxxx. Invalid characters or a length greater than 8-bytes was used.

System Action: Processing terminates with RC=8.

Programmer Response: Correct the EXIT specification on the DBD statement.

Problem Determination: 2, 3, 8 and 18.

DBD760 xxxxxxxx EXIT OPTION SPECIFIED FOR EXIT yyyyyyyy IS NOT A VAILD OPTION. KEY, NOKEY, DATA, NODATA, PATH, NOPATH, CASCADE, NOCASCADE ARE VALID OPTIONS

Explanation: An EXIT= parameter was specified on the DBD statement with the invalid option xxxxxxxx.

System Action: Processing terminates with RC=8.

Programmer Response: Correct the EXIT specification on the DBD statement.

Problem Determination: 2, 3, 8 and 18.

DBD765 xxxxxxxx EXIT CASCADE OPTION SPECIFIED FOR EXIT yyyyyyyy IS NOT A VALID OPTION. KEY, NOKEY, DATA, NODATA, PATH, NOPATH ARE VALID OPTIONS

Explanation: An EXIT= parameter was specified on the DBD statement with the invalid option xxxxxxxx for CASCADE.

System Action: Processing terminates with RC=8.

Programmer Response: Correct the EXIT specification on the DBD statement.

Problem Determination: 2, 3, 8 and 18.

DGEN100 DBD CONTAINS NO SEGMENTS

Explanation: No SEGM statements were specified for this DBDGEN.

System Action: The remaining DBDGEN parameters are checked for validity. The previously specified parameters are checked for validity where possible. The DBDGEN terminates prior to expansion.

Programmer Response: Correct the error, and rerun DBDGEN.

DGEN110 DBDGEN TERMINATED, ERRORS IN DBD

Explanation: A level 8 or higher condition code was detected prior to expansion in the DBDGEN macro.

System Action: None

Programmer Response: Correct the erroneous statements, and rerun DBDGEN.

DGEN115 NUMBER OF SEGM STATEMENTS MUST EQUAL THE NUMBER OF INDEX DATA BASE NAMES

Explanation: The number of SEGM statements was more or less than the number of shared secondary index names coded on the DBD statement for an index DBD.

System Action: IMS terminates the DBDGEN.

Programmer Response: The number of names and SEGM statements must be the same.

DGEN117 THE BLOCK SIZE VALUE EXCEEDS 32752 BYTES. IMAGE COPY WILL NOT BE AVAILABLE.

Explanation: This is a warning message. The DBDGEN utility assigned 32767 bytes to the block size, since the value of 32752 was not large enough to hold the longest segment and some necessary overhead.

The Image Copy utility cannot be run with 32752 bytes specified because image copy processing module DFSUDMP0 adds fifteen bytes to the block size for double word alignment of its prefix. The maximum block size in a DBDGEN statement is 32767 bytes.

User Response: To save a database using the Image Copy utility, specify either a smaller value for the BYTES operand in the SEGM statement or a smaller value for BLOCK/SIZE operands in the DATASET statement. Then, rerun DBDGEN.

DGEN118 THE USER SPECIFIED CI SIZE VALUE EXCEEDS 30720, WILL NOT HOLD THE MINIMUM SIZE BIT MAP, OR WILL NOT HOLD THE MAXIMUM SIZE SEGMENT IN THIS DATA SET GROUP

Explanation: This is a warning message. For a (HDAM, VSAM) or a (HIDAM, VSAM) database, a CI size was specified on the DATASET statement which exceeds 30720, or which is too small to hold the minimum size bit map plus overhead, or the maximum size segment plus overhead in this data set group. For fixed length compressed segments, the maximum segment size is computed to include a 10-byte expansion which allows for noncompressible segment occurrences.

System Action: The user specified value is used in subsequent processing.

Programmer Response: None

DGEN120 SEGMENT name NOT IN DATABASE name

Explanation: The named segment has been defined as existing in the database currently being defined. No SEGM statement was found to identify the named segment in its NAME operand.

System Action: No default is given.

Programmer Response: Correct the error, and rerun DBDGEN.

DGEN130 REFERENCED PAIRED SEGMENT DOES NOT SPECIFY 'PAIRED' IN ITS POINTER OR PTR OPERAND. PAIRED SEGMENT IS name.

Explanation: Self-explanatory

System Action: None

Programmer Response: Correct the error, and rerun DBDGEN.

DGEN140 DATASET—n name CONTAINS NO SEGMENTS

Explanation: No SEGM statements were found following the DATASET statement specified in the message.

System Action: This message is issued and processing continues.

DGEN150 LCHILD STATEMENT FOR ROOT SEGMENT name OMITTED OR INVALID

Explanation: An LCHILD statement was not specified or was specified incorrectly for the root segment. A HIDAM database requires an LCHILD statement for the primary HIDAM index database. Each segment in an index database must have an LCHILD statement defined.

System Action: No default is taken.

Programmer Response: Provide an LCHILD statement for the root segments, and rerun DBDGEN.

DGEN160 ROOT SEGMENT name HAS NO SEQUENCE FIELD

Explanation: There is no sequence field defined in any of the FIELD statements for the SEGM statement defining the root segment. Each segment in an index database must have a sequence field defined.

System Action: No default is taken.

Programmer Response: Provide a sequence field for the root segments, and rerun DBDGEN.

DGEN165 PREFIX LENGTH OF ALL SEGM STATEMENTS IN A SHARED SECONDARY INDEX MUST BE EQUAL

Explanation: Multiple secondary indexes can be placed in a single shared index database, if the key offset positions in each indexing segment are the same. This implies that the prefix length of each segment must be the same.

System Action: The specified operand information is used in subsequent validity checking.

Programmer Response: Correct the errors, and rerun DBDGEN.

DGEN170 SEGMENT (name) LENGTH PLUS PREFIX EXCEEDS BLOCKSIZE MINUS FREE SPACE PERCENTAGE REQUESTED. SEGMENT WILL BE STORED AS ONLY SEGMENT IN A BLOCK.

Explanation: Informational only.

System Action: The segment will be stored as the only segment in the block. Free space will be reduced by the amount the segment exceeds the amount requested.

DGEN185 LCHILD STATEMENT, name, REFERENCES A PAIRED SEGMENT, segname, WHICH IS NOT A CHILD OF THE LOGICAL PARENT

Explanation: The LCHILD statement indicated in the message above has a PAIR operand specifying a physically or virtually paired segment. But the physical parent of this paired segment is not the same segment that contains the LCHILD statement.

System Action: The specified operand information is used in subsequent validity checking.

Programmer Response: Correct the errors, and rerun DBDGEN.

DGEN200 BLOCK SIZE EXCEEDS MAXIMUM BLOCK ON TRACK—size

Explanation: For HSAM or SHSAM databases, a block size or blocking factor was specified on the DATASET statement which caused the maximum allowable block size on a track to be exceeded. The maximum allowable block size is the track length or 32K bytes, whichever is smaller.

System Action: The user specified block size value can be reset.

Programmer Response: Correct the error, and rerun DBDGEN.

DGEN210 ONE OR MORE SEGMENTS IN THE ABOVE DATA SET GROUP WILL NOT FIT IN THE MAXIMUM ALLOWABLE CI SIZE—30720

Explanation: This is a warning message generated for (HDAM,VSAM) or (HIDAM,VSAM) databases. One or more segments plus overhead bytes exceed the maximum CI size of 30720.

DGEN220 SPECIFIED KSDS LOGICAL RECORD LENGTH RESET TO MULTIPLE OF 2...length

Explanation: This is a warning message generated for (HISAM,VSAM) or (INDEX,VSAM) databases. The user's specified logical record for KSDS was not specified as a multiple of 2.

DGEN229 THE MAXIMUM ROOT SEGMENT SIZE WILL NOT FIT IN THE USER SPECIFIED OR MAXIMUM KSDS PRIME LOGICAL RECORD LENGTH...lrecl

Explanation: This is a warning message. For a (HISAM, VSAM), SHISAM, or (INDEX, VSAM) database, the maximum size root segment plus overhead will not fit in the user specified or maximum KSDS prime logical record length for this data set group. For a fixed length compressed root segment, the maximum root segment size additionally includes a 10-byte expansion which allows for noncompressible root segment occurrences.

System Action: The user-specified or maximum KSDS prime logical record length is used in subsequent processing.

Programmer Response: None

DGEN232 THE MAXIMUM SEGMENT LENGTH IN THIS DATA SET GROUP WILL NOT FIT IN THE USER SPECIFIED OR MAXIMUM ESDS OVERFLOW LRECL...lrecl

Explanation: For a (HISAM, VSAM) database, the user-specified or maximum ESDS overflow LRECL is not large enough to contain the largest segment plus overhead in this data set group. For fixed length compressed segments, the maximum segment size additionally includes a 10-byte expansion which allows for noncompressible segment occurrences.

System Action: The user-specified or maximum ESDS overflow LRECL is used in subsequent processing.

Programmer Response: This is a warning message.

DGEN240 SPECIFIED BLOCKING FACTOR CAUSES MAXIMUM ALLOWABLE CI SIZE (30720) TO BE EXCEEDED. BLOCKING FACTOR SPECIFIED—number RESET TO BLOCKING FACTOR—number

Explanation: This is a warning message.

DGEN245 SPECIFIED CI SIZE IS LESS THAN CALCULATED OR SPECIFIED LOGICAL RECORD LENGTH—xxxxx

Explanation: You specified a CI size minus VSAM overhead that is less than the logical record length, specified or calculated.

System Action: The DBDLRECL macro resets the CI size to an internally calculated value, and DBDGEN continues.

Programmer Response: Correct the error, and rerun DBDGEN.

DGEN250 SPECIFIED ESDS LRECL—size RESET TO MULTIPLE OF 2—size

Explanation: This is a warning message generated for (HISAM,VSAM) or (INDEX,VSAM) databases. The user's specified logical record for the ESDS data set was not specified as a multiple of 2.

DGEN260 SPECIFIED ESDS BLOCKSIZE INVALID. LRECL AND BLOCKSIZE RESET TO PRIME VALUES.

Explanation: This is a warning message.

DGEN265 ESDS LRECL AND/OR CI SIZE INVALID.

Explanation: The overflow ESDS logical record length plus VSAM overhead does not fit in the overflow ESDS CI size, or the overflow ESDS CI size exceeds 30720.

System Action: The overflow LRECL and CI size values are reset to the prime values of this data set group.

Programmer Response: Correct the errors, and rerun the DBDGEN.

DGEN270 ESDS DATA SET SPECIFICATION IS IGNORED. (INDEX,VSAM) DATA SET CONTAINS SEGMENTS WITH UNIQUE KEYS ONLY.

Explanation: This warning message is generated for (INDEX,VSAM) databases. An entry-sequenced data set is not used/required for an INDEX database that contains segments with unique keys.

DGEN271 ESDS DATA SET SPECIFICATION IS IGNORED. (HISAM, VSAM) DATA SET WITH A SINGLE SEGM.

Explanation: This warning message is generated for (HISAM/VSAM) databases. An entry-sequenced data set is not used or required for a HISAM database that contains only one segment.

DGEN300 INVALID POSITIONAL OPERAND—operand— SPECIFIED ON THIS STATEMENT

Explanation: One or more positional operands were specified which are undefined in the syntax of the statement type being processed.

System Action: The invalid positional operands are ignored.

Programmer Response: Remove the positional operands, and rerun DBDGEN.

DGEN305 SHSAM SEGMENT SIZE MUST BE AN EXACT DIVISOR OF BLOCK SIZE

Explanation: For an SHSAM database, the root segment size must be an exact divisor of the user-specified block size.

System Action: The user-specified information is used in subsequent processing.

Programmer Response: Correct the error, and rerun DBDGEN.

DGEN310 PRIOR DBDGEN STATEMENT SHOULD NOT BE PRESENT

Explanation: A DBDGEN statement was specified before a DATASET, AREA, SEGM, LCHILD, FIELD, XDFLD, or DBDGEN statement. There must be only one DBDGEN statement, and it must be at the end of the input stream.

System Action: The results obtained from the scan of this statement, and of the succeeding statements, are unpredictable.

Programmer Response: Remove or rearrange the incorrect statements, and rerun DBDGEN.

DGEN320 THERE IS A SECONDARY INDEX LCHILD STATEMENT (PTR=INDX/SYMB) WHICH IS NOT PAIRED TO AN XDFLD STATEMENT.

Explanation: There are more secondary index LCHILD statements than there are XDFLD statements.

System Action: All specified operand information is used in subsequent validity checking.

Programmer Response: Correct the error, and rerun DBDGEN.

DGEN440 COMPRTN= IS INVALID FOR SEGMENT xxxxxxxx.

Explanation: The COMPRTN= is prohibited when one of the following occurs:

- A DEDB database and the segment contains only a key field.
- A DEDB database and the key field is located at the end of the segment.

Programmer Response: Correct the error, and rerun DBDGEN.

DGEN500 SEGMENT PREFIX LENGTH EXCEEDS 1022 BYTES. SEGMENT NAME=*xxxxxxxx* PREFIX LENGTH = *yyyy*.

Explanation: The length of the prefix generated for the segment identified by *xxxxxxxx* is *yyyy* bytes, which is greater than the allowed maximum of 1022 bytes. This situation occurs when there are more than 255 pointers in a segment prefix. (Pointers are 4 bytes each.)

Programmer Response: Reduce the number of pointers in the prefix in the segment identified by *xxxxxxxx* and recompile the DBD.

DMAN100 DATA SET SPECIFICATION LIMIT EXCEEDED

Explanation: There are more DATASET statements than are permissible for the DL/I access method specified.

System Action: The information specified on the current DATASET statement is used for subsequent validity checking. If the number of DATASET statements exceeds 10, the information from the 10th DATASET statement is overlaid by each succeeding DATASET statement greater than 10.

Programmer Response: Reduce the number of DATASET statements to the correct limit, and rerun DBDGEN.

DMAN110 DD1 OPERAND IS OMITTED OR INVALID

Explanation: The DD1 operand is omitted or it is longer than 8 characters, or has a first character which is not alphabetic, #, @ or $, or whose remaining characters are not alphabetic, numeric, #, @ or $.

System Action: The specified value is used for validity checking of subsequent dependent parameters. In the case of omission, a null value is entered.

Programmer Response: Correct the DD1 operand, and rerun DBDGEN.

DMAN120 DD2 OPERAND IS OMITTED OR INVALID

Explanation: The DD2 operand has been omitted or it is longer than 8 characters, or has a first character which is not alphabetic, #, @ or $, or whose remaining characters are not alphabetic, numeric, #, @, or $. This operand is only valid for HSAM, simple HSAM databases, or GSAM databases.

System Action: The specified value is used for validity checking of subsequent dependent parameters. In the case of omission, a null value is entered.

Programmer Response: Correct the DD2 operand, and rerun DBDGEN.

DMAN130 OVFLW AND DD2 OPERANDS ARE CONFLICTING

Explanation: The OVFLW and DD2 operands are mutually exclusive.

System Action: The OVFLW operand is ignored.

Programmer Response: Correct the OVFLW or DD2 operand, and rerun DBDGEN.

DMAN140 OVFLW OPERAND IS OMITTED OR INVALID

Explanation: The OVFLW operand is omitted or it is longer than 8 characters, or has a first character which is not alphabetic, #, @ or $, or whose remaining characters are not alphabetic, numeric, #, @ or $.

System Action: The specified value is used for validity checking of subsequent dependent parameters. In the case of omission, a null value is entered.

Programmer Response: Correct the OVFLW operand, and rerun DBDGEN.

DMAN150 DEVICE OPERAND xxx IS OMITTED OR INVALID. A 3330 MODEL 1 HAS BEEN ASSUMED.

Explanation: The DEVICE operand is omitted or does not specify one of the following valid values: 2314, 2305, 2319, 3330, 3340, 3350, 2400, 3400, or TAPE. For ACCESS=DEDB, the valid values for this operand are: 2314, 2319, 2305, 3330, 3340, and 3350.

System Action: A 3330 model 1 is assumed for space calculation purposes. For ACCESS=DEDB, DBDGEN is terminated prior to expansion.

Programmer Response: Correct the DEVICE operand, and rerun DBDGEN.

DMAN155 MODEL xx INVALID, MODEL 2 ASSUMED FOR SPACE CALCULATION

Explanation: You specified an invalid operand for a 2305. Valid operands for DEVICE=2305 are MODEL=1 or MODEL=2.

System Action: The DATASET macro uses the default, MODEL=2 for the space calculation and DBDGEN continues.

DMAN157 MODEL xx INVALID, MODEL 1 ASSUMED FOR SPACE CALCULATIONS

Explanation: DEVICE=3330 was specified and the MODEL operand was omitted or not equal to 1 or 11.

System Action: MODEL=one is assumed and the DBDGEN continues.

Programmer Response: Correct the MODEL operand, and rerun DBDGEN.

DMAN160 DEVICE OPERAND IS INVALID FOR ACCESS=access

Explanation: The value TAPE, 2400, or 3400 was entered in the DEVICE operand, and the DBD ACCESS operand did not specify HSAM or simple HSAM.

System Action: Space calculations are done based

on the specified device type and the given access method. Space calculations are not reliable in most cases.

Programmer Response: Correct the DEVICE operand, and rerun DBDGEN.

DMAN170 ENTERED DDNAME IS A DUPLICATE—name

Explanation: The specified ddname is a duplicate of a name previously specified by the DD1, DD2, or OVFLW operand.

System Action: The name is used for further validity checking.

Programmer Response: Correct the ddname, and rerun DBDGEN.

DMAN180 DATA SET NAME IS A DUPLICATE

Explanation: The label on this DATASET statement is the same as the label on a previous DATASET statement, and both contain operands. Only the first DATASET statement with a common label can contain operands.

System Action: A new data set group is created. Succeeding parameters are evaluated based on the new DATASET statement.

Programmer Response: Examine your requirements, correct the erroneous information, and rerun DBDGEN.

DMAN190 DATA SET NAME FIELD IS INVALID

Explanation: The label field on the DATASET statement is invalid because it is longer than 8 characters, or has a first character which is not alphabetic, #, @ or $, or whose remaining characters are not alphabetic, numeric, #, @ or $.

System Action: The specified value is used for validity checking of subsequent dependent parameters.

Programmer Response: Correct the label field on the DATASET statement, and rerun DBDGEN.

DMAN200 RECORD OPERAND IS INVALID

Explanation: One of the following occurred:

- The RECORD operand contains more than two values, values which are not self-defining, values which are less than or equal to zero, or values which exceed 30713, where VSAM is the system access method.
- For GSAM: The second RECORD operand value exceeds the first, or RECFM=F/FB was specified, but the first RECORD operand value is not equal to the second RECORD operand value.

System Action: The scan of the RECORD operand is terminated at the point the error is detected.

Programmer Response: Correct the errors, and rerun the DBDGEN.

DMAN210 BLOCK OPERAND IS INVALID

Explanation: One of the following occurred:

- The BLOCK operand contains more than two values, values which are not self-defining, or values which are less than or equal to zero.
- For HDAM and HIDAM: More than one BLOCK operand value was specified, or the value exceeded 30709, where VSAM was the system access method.
- For GSAM: More than one BLOCK operand value was specified.

System Action: The scan of the BLOCK operand is terminated at the point the error is detected.

Programmer Response: Correct the BLOCK operand, and rerun DBDGEN.

DMAN215 SIZE OPERAND IS INVALID

Explanation: One of the following occurred:

- The SIZE operand contains more than two values, values which are not self-defining, or values which are less than or equal to zero.
- The BLOCK operand was also specified; the BLOCK and SIZE operands are mutually exclusive.
- For HSAM and SHSAM, the SIZE operand was specified (it is invalid for these databases).
- VSAM is the system access method, and the value of the SIZE operand exceeds 30720.
- For HDAM, HIDAM, and GSAM databases, more than one operand value was specified.
- If ACCESS=DEDB was specified on the DBD statement, the valid values for this operand are 512, 1024, 2048, and 4096. 4096 is invalid for a 2314 or a 2319.

System Action: The scan of the SIZE operand is terminated at the point the error is detected.

Programmer Response: Correct the SIZE operand, and rerun the DBDGEN.

DMAN217 SIZE SPECIFICATION ROUNDED TO NEXT 512 OR 2K MULTIPLE

Explanation: VSAM control interval sizes must always be a 512 multiple. If greater than 8K, they must be a 2048 multiple.

System Action: The user specified value is reset to the proper VSAM multiple.

Programmer Response: Correct the error.

DMAN220 POSITIONAL OPERAND ASSUMES LOGICAL DATA SET

Explanation: The inclusion of a positional operand assumes a DBDGEN for a logical data set.

System Action: This is a warning message; DBDGEN continues. No other data set parameters are scanned, since they are invalid for a logical DBDGEN.

DMAN230 KEYWORD SPECIFICATIONS ARE INVALID FOR A LOGICAL DATA SET DEFINITION

Explanation: If the LOGICAL operand is specified on a DATASET statement, no other operands can be specified.

System Action: The DBDGEN is processed as a logical DBDGEN. No other data set operands are scanned.

Programmer Response: Remove the erroneous keyword parameters, and rerun DBDGEN.

DMAN240 DD2 AND OVFLW OPERANDS ARE INVALID FOR {HDAM|HIDAM}

Explanation: Neither the DD2 nor the OVFLW operands can be specified for data sets that use HDAM or HIDAM as the access method.

System Action: The values specified are ignored.

Programmer Response: Remove the DD2 operand or the OVFLW operand, or both, and rerun DBDGEN.

DMAN250 DATA SET NOT PREVIOUSLY ESTABLISHED.

Explanation: The label field of this DATASET statement does not refer back to any previous DATASET statement with the same label.

System Action: The last data set group processed remains the current data set group used to validate subsequent statements.

Programmer Response: Correct the DATASET label field, and rerun DBDGEN.

DMAN260 ENTERED DDNAME IS RESERVED—name

Explanation: One of the following names was specified: IEFRDER, IMSLOGR, QBLKS, SHMSG, LGMSG, IMSACB, IMSDILIB, IMSSPA, IMSDBL, SYSUDUMP, STEPLIB.

System Action: No default is used.

Programmer Response: Correct the ddname, and rerun DBDGEN.

DMAN270 REVERSE REFERENCE TO A PREVIOUS DATA SET GROUP IS ONLY VALID FOR HD ORGANIZATIONS

Explanation: The label field of this DATASET statement refers back to a previous DATASET statement with the same label. This usage of the label field is only valid for HDAM and HIDAM. In particular, for HISAM, segments must be placed in each data set group according to their hierarchic position in the data structure.

System Action: DBDGEN establishes the referenced data set group as the current data set group or, if there were DATASET statement operands specified, assumes this is a new data set group with a duplicate name field.

Programmer Response: Correct the error, and rerun DBDGEN.

DMAN275 ACCESS=LOGICAL MUST BE CODED IN THE DBD STATEMENT FOR A LOGICAL DATA SET

Explanation: A DATASET statement was specified which indicates this is a LOGICAL database, but did not specify this on the DBD statement.

System Action: DBDGEN assumes this is a LOGICAL database. If this is not the case, unpredictable results can occur.

Programmer Response: Correct the error, and rerun DBDGEN.

DMAN280 SCAN OPERAND IS INVALID

Explanation: The entered value is not a decimal integer value, is less than zero, exceeds 255, or has been specified with a database type other than HDAM or HIDAM.

System Action: No default is used.

Programmer Response: Correct the SCAN operand, and rerun DBDGEN.

DMAN290 FRSPC OPERAND IS INVALID

Explanation: One of the following occurred:

- The operand has been specified with a database type other than HDAM or HIDAM.
- The operand contains more than 2 parameters.
- The first parameter was specified but was not zero or in the range from 2 to 100.
- The second parameter was not specified as a decimal number in the range from 0 to 99.

System Action: No default is used.

Programmer Response: Correct the FRSPC operand, and rerun DBDGEN.

DMAN300 INVALID KEYWORD PARAMETERS SPECIFIED FOR ACCESS=xxx

Explanation: One of the following occurred:

- For ACCESS=MSDB, an operand other than the REL operand was specified on the DATASET statement.
- For ACCESS not MSDB or DEDB, the REL, ROOT, or UOW keyword parameter was specified. These operands are exclusively MSDB/DEDB keyword parameters.

System Action: The invalid operands are ignored.

Programmer Response: Remove the invalid operands or correct the DL/I Access Method, and rerun DBDGEN.

DMAN305 ACCESS=LOGICAL ONLY ALLOWS A LOGICAL DATA SET TO BE SPECIFIED

Explanation: ACCESS=LOGICAL was specified on the DBD statement, but a nonlogical DATASET statement was specified.

System Action: No more operands on this DATASET statement are processed. This is a severe error which can cause unpredictable results.

Programmer Response: Correct the error, and rerun DBDGEN.

DMAN320 REL OPERAND IS OMITTED OR INVALID.

Explanation: The REL operand is omitted or does not specify one of the following valid values: NO, TERM, FIXED, or DYNAMIC in the first value; and a l-8 alphanumeric character in the second value for TERM, FIXED and DYNAMIC.

System Action: The system continues to process the remaining statements.

Programmer Response: Correct the REL operand, and rerun the DBDGEN.

DMAN330 INVALID AREA STMT PLACEMENT FOR ACCESS=DEDB.

Explanation: An AREA statement for a DBDGEN with ACCESS=DEDB must be placed after the DBD statement and preceding a SEGM statement in an input string.

System Action: The system continues to process the parameter on the AREA statement and the remaining statements.

Programmer Response: Correct the misplaced AREA statement, and rerun the DBDGEN.

DMAN340 ROOT OPERAND IS OMITTED OR INVALID.

Explanation: The ROOT operand is omitted or one of the following occurred:

- The operand did not contain two parameters.
- The first parameter was specified, but was not in the range of 2 through 32767.
- The second parameter was specified but was not greater than zero or less than the first parameter.

System Action: The system continues to process the parameter on the AREA statement and the remaining statements.

Programmer Response: Correct the ROOT operand, and rerun the DBDGEN.

DMAN350 UOW OPERAND IS OMITTED OR INVALID.

Explanation: The UOW operand is omitted, or one of the following occurred:

- The operand did not contain two parameters.
- The first parameter was specified but was not in the range of 2 through 32767.
- The second parameter was specified but was not greater than zero or less than the first parameter.

System Action: The system continues to process the parameter on the AREA statement and the remaining statements.

Programmer Response: Correct the UOW operand, and rerun the DBDGEN.

DMAN360 DATASET STMT IS INVALID FOR ACCESS=*access*

Explanation: The DATASET statement is not supported for HALDBs.

System Action: The DATASET statement is ignored.

Programmer Response: Delete the DATASET statement and rerun DBDGEN.

DMAN400 OVERFLOW/OUTPUT RECORD SIZE CANNOT BE LESS THAN PRIME/INPUT RECORD SIZE.

Explanation: The second value in the RECORD operand must always be greater than or equal to the first value.

System Action: The given values are ignored.

Programmer Response: Correct the RECORD operand, and rerun DBDGEN.

DMAN420 RECORD/BLOCK SIZE EXCEEDS TRACK LENGTH

Explanation: One of the following occurred:

- For HSAM, SHSAM, HISAM, or INDEX databases, the logical record size exceeds the maximum allowable block on a track or 32K bytes, whichever is smaller.
- For HDAM or HIDAM, the block size with or without overhead exceeds the maximum allowable block on a track or 32K bytes, whichever is smaller.

System Action: The specified operand information is used in subsequent validity checking.

Programmer Response: Correct the error, and rerun DBDGEN.

DMAN425 BLOCK SIZE EXCEEDS TRACK LENGTH

Explanation: For HISAM or INDEX databases, the block size specified cannot exceed the maximum allowable block on a track or 32K bytes, whichever is smaller.

System Action: The specified operand information is used in subsequent validity checking.

Programmer Response: Correct the error, and rerun DBDGEN.

DMAN430 RECORD FORMAT IS OMITTED OR INVALID.

Explanation: The RECFM= operand contains invalid values, or has been specified inappropriately. The valid values for this operand are: F/FB/V/VB/U.

System Action: DBDGEN is terminated because of the operand errors.

Programmer Response: Correct the errors, and resubmit the job.

DMAN432 BLOCK AND SIZE OPERANDS ARE MUTUALLY EXCLUSIVE

Explanation: Both a BLOCK operand value and a SIZE operand value were specified. This is invalid.

System Action: The scan of the DATASET operands is terminated at the point the error is detected.

Programmer Response: Correct the errors, and rerun DBDGEN.

DMAN440 DEVICE AND MODEL OPERANDS ARE INAPPLICABLE TO GSAM.

Explanation: The DEVICE and MODEL operands are invalid for a DBDGEN with ACCESS=GSAM.

System Action: DBDGEN is terminated because of the operand error.

Programmer Response: Correct the error, and resubmit the job.

DMAN465 SPECIFICATION OF OVERFLOW/OUTPUT RECORD, BLOCK, OR SIZE OPERAND VALUE REQUIRES OVERFLOW/OUTPUT DDNAME BE GIVEN.

Explanation: An overflow or output logical record size, or a block or CI size was specified without a ddname for the overflow or output data set being provided. For VSAM primary index (INDEX,VSAM) databases, no overflow logical record length (reclen2) parameter should be defined on the RECORD= operand since all index segments are inserted into the index KEY SEQUENCED DATA SET.

System Action: The specified operand information is used in subsequent validity checking.

Programmer Response: Correct the error, and rerun DBDGEN.

DMAN470 {INPUT|OUTPUT} BLOCKING FACTOR FOR HSAM MUST BE 1. RESET TO 1

Explanation: This is a warning message. The input blocking factor or the output blocking factor for HSAM was not specified as 1. HSAM always has unblocked format.

System Action: If a logical record size was specified, it is reset based on the specified blocking factor.

Programmer Response: None

DMAN475 {INPUT|OUTPUT} LOGICAL RECORD SIZE RESET TO LRECL TIMES BLOCKING FACTOR

Explanation: This is a warning message. The input blocking factor or the output blocking factor for HSAM was not specified as 1. HSAM always has unblocked format. The logical record size is reset based on the user specified blocking factor and a blocking factor of 1 is used in subsequent validity checking.

System Action: The modified operand information is used in subsequent validity checking.

DMAN490 RECORD OPERAND IS IGNORED FOR HD

Explanation: This is a warning message. A RECORD operand value was specified. This is not valid for HDAM or HIDAM.

System Action: The specified RECORD operand value is ignored.

Programmer Response: None

DMAN510 SEARCHA IS INSIGNIFICANT WITHOUT FREE BLOCK FREQ FACTOR

Explanation: The free block frequency factor is missing on the FRSPC parameter of the DATASET macro. If you specify the SEARCHA parameter, you must also specify a free block frequency factor on the FRSPC parameter. These parameters work together.

System Action: IMS ignores the SEARCHA parameter.

User Response: If you did not intend to omit the free block frequency factor, provide a FRSPC value on the DATASET macro; then rerun DBDGEN.

DMAN520 INVALID SEARCH ALGORITHM ID. DEFAULT TO 0

Explanation: The value specified on the SEARCHA parameter of the DATASET macro is invalid.

System Action: IMS assigns the SEARCHA parameter a default value of 0. The DBDGEN will complete with a job step return code of 4 or more.

User Response: If SEARCHA=0 is unacceptable, correct the SEARCHA specification; then rerun the DBDGEN.

DMAN530 INVALID RECORD LENGTH SPECIFIED FOR ACCESS=(GSAM, BSAM) AND FOR RECFM=(V OR VB).

Explanation: An invalid record length was specified on the RECORD parameter of the DATASET statement. The RECORD size must not exceed SIZE minus 6.

User Response: Correct the RECORD size, and rerun DBDGEN.

EXT001 EXTERNAL REFERENCE TABLE FULL

Explanation: More than 255 external databases or edit/compression routines were specified, or both, in this DBDGEN.

System Action: The first 254 are entered in the table. The 255th entry is overlaid by any entries larger than 255. The last database referenced is the 255th entry.

Programmer Response: Correct the error, and rerun the DBDGEN.

FLD100 SEGM CARD MUST PRECEDE FIELD

Explanation: A SEGM statement must precede a FIELD statement in the sequence of input to DBDGEN.

Programmer Response: Correct the error, and rerun DBDGEN.

FLD110 NAME OPERAND IS OMITTED OR INVALID

Explanation: One of the following occurred:

- The NAME operand was not specified.
- The NAME operand contains more than three parameters, or more than one parameter, but the second parameter is not SEQ.
- The NAME operand specifies a name value which exceeds 8 characters, or has invalid character content.
- The NAME operand specifies a third parameter value which is not M or U.
- An invalid sequence field has been specified for ACCESS=MSDB.

System Action: The scan of the NAME operand is terminated at the point the error is detected.

Programmer Response: Correct the error, and rerun the DBDGEN.

FLD120 SEGMENT name HAS MULTIPLE SEQUENCE FIELDS

Explanation: A segment can only have one sequence field, unless it is involved in a virtually paired bidirectional logical relationship. More than one FIELD statement had the SEQ parameter specified for the named segment.

System Action: The specified operand information is used in subsequent validity checking.

Programmer Response: Correct the error, and rerun DBDGEN.

FLD130 TYPE OPERAND IS INVALID

Explanation: The TYPE operand has been specified with a value other than X, P, or C. If ACCESS=MSDB was specified on the DBD statement, the TYPE operand has been specified with a value other than X, P, C, F, or H. Or, this is an MSDB sequence field with a TYPE value other than X or C.

System Action: The scan of the TYPE operand is terminated at the point the error is detected.

Programmer Response: Correct the TYPE operand, and rerun DBDGEN.

FLD135 ALL SEQUENCE SUBFIELDS MUST HAVE THE SAME UNIQUE OR MULTIPLE SPECIFICATIONS

Explanation: Multiple sequence fields were specified for the current segment being processed, but some were defined as unique and others as nonunique.

System Action: The specified operand information is used in subsequent validity checking.

Programmer Response: Correct the error, and rerun DBDGEN.

FLD140 NON-UNIQUE KEYS REQUIRE AN OVERFLOW DATA SET.

Explanation: An index DBD with nonunique keys requires that an overflow data set ddname be coded on the DATASET macro.

System Action: The specified operand information is used in subsequent validity checking.

Programmer Response: Code an overflow data set ddname on the DATASET statement or specify unique keys on this FIELD statement.

FLD145 NONUNIQUE KEYS WITH DOSCOMP ARE INVALID

Explanation: You coded the FIELD macro with nonunique keys. The DBD indicated that this was DOS compatible. DOS/VS DL/I does not accept nonunique keys.

System Action: IMS terminates the DBDGEN after checking all the following parameters.

Programmer Response: Change the keys to unique keys.

FLD150 BYTES OPERAND IS OMITTED OR INVALID

Explanation: The BYTES operand is omitted or does not contain a self-defining term with a value less than or equal to 255 for non-system-related fields; for a /CK system-related field, the value must not exceed the length of the concatenated key of the index source segment. The BYTES operand cannot be zero or a negative value. If ACCESS=MSDB was specified on the DBD statement, the following field lengths are allowed:

- Type X bytes: 1-256
- Type P bytes: 1-16
- Type C bytes: 1-256
- Type F bytes: 4
- Type H bytes: 2

In addition, for an MSDB, a sequence field cannot exceed 240 bytes.

System Action: The specified BYTES operand information is used in subsequent validity checking.

Programmer Response: Correct the BYTES operand, and rerun DBDGEN.

FLD155 NON-UNIQUE ROOT SEGMENT KEYS ARE INVALID WITH ACCESS=access

Explanation: The database type specified in the DBD statement cannot have nonunique root segment keys.

System Action: The specified operand information is used in subsequent validity checking.

Programmer Response: Correct the error, and rerun DBDGEN.

FLD160 START OPERAND IS OMITTED OR INVALID

Explanation: The START operand on the FIELD statement has been omitted, or is not a positive numeric term within the maximum allowed. If this is an index DBDGEN, START must equal one if the SEQ parameter is coded on the FIELD statement.

System Action: The specified START operand information is used in subsequent validity checking.

Programmer Response: Correct the error, and rerun DBDGEN.

FLD170 FIELD EXTENDS BEYOND DEFINED SEGMENT LENGTH

Explanation: The value specified in the BYTES operand on the FIELD statement added to the value minus 1 specified in the START operand exceeds the value specified in the BYTES operand on the SEGM statement.

System Action: Some of the specified operand information is used in subsequent validity checking.

Programmer Response: Correct the errors, and rerun DBDGEN.

FLD180 FIELD SPECIFICATION LIMIT EXCEEDED

Explanation: More than 1000 FIELD or XDFLD statements have been defined in this DBDGEN.

Programmer Response: Reduce the number of FIELD or XDFLD statements to less than or equal to 1000, and rerun DBDGEN.

FLD190 DUPLICATE FIELD NAME IN SEGMENT name

Explanation: The value specified in the NAME operand of this FIELD or XDFLD statement is a duplicate of one specified on another FIELD or XDFLD statement for this segment.

Programmer Response: Ensure that each FIELD or XDFLD statement for a segment type has a unique name, and rerun DBDGEN.

FLD200 SEGMENT FIELD LIMIT EXCEEDED

Explanation: More than 255 FIELD or XDFLD statements have been defined in one segment.

Programmer Response: Reduce the number of FIELD or XDFLD statements to less than or equal to 255 and rerun DBDGEN.

FLD210 FIELD STATEMENT IS INVALID FOR PRECEDING SEGM

Explanation: FIELD statements are invalid for nonpaired logical segments.

Programmer Response: Remove the FIELD statements for this segment, and rerun DBDGEN.

FLD220 SEQUENCE FIELD INVALID FOR PRECEDING SEGM

Explanation: Sequence fields are invalid in an HD organization, if the segment does not contain TWIN, TWINBWD, HIER, or HIERBWD pointers.

Programmer Response: Remove the SEQ keyword on this FIELD statement, or correct the SEGM statement, and rerun DBDGEN.

FLD225 SEQUENCE FIELD SPECIFICATION IS INVALID

Explanation: You specified a system-related field name as a sequence field. This is invalid.

Programmer Response: Remove the SEQ parameter from this FIELD statement, and rerun DBDGEN.

FLD230 SEQUENCE FIELDS MUST IMMEDIATELY FOLLOW SEGM

Explanation: A FIELD or XDFLD statement containing the keyword SEQ must be the first FIELD or XDFLD statement following a SEGM statement as input to DBDGEN.

Programmer Response: Ensure that the FIELD statements containing the SEQ keyword are in proper position in the input to DBDGEN, and rerun DBDGEN.

FLD235 SYSTEM RELATED FIELD IS INVALID WITH ACCESS=access

Explanation: The DL/I database organization specified on the DBD statement does not allow /SX or /CK system related fields.

System Action: The specified operand information is used in subsequent validity checking.

Programmer Response: Correct the error, and rerun DBDGEN.

FLD300 INVALID FIELD OVERLAP FOR MSDB DBDS.

Explanation: One of the following occurred:

- The sequence field was specified as part of another field.
- The field contained an arithmetic field, but it did not contain the entire arithmetic field.
- The arithmetic field contained another field.
- If two fields fully overlap each other, the first one appears in the DBDGEN input stream and is defined as a containing field. The subsequent field is defined as a contained field.

System Action: The system continues to process the parameter on the FIELD statement and the remaining statements.

Programmer Response: Correct the START or BYTES operand on the FIELD statement, and rerun the DBDGEN.

FLD997 START AND BYTES OPERAND FOR EACH SEQUENCE FIELD IN A MULTI-INDEX DBD MUST EQUAL START AND BYTES OPERANDS OF EACH PREVIOUSLY DEFINED SEGMENT SEQUENCE FIELD

Explanation: The NAME operand on the DBD statement specified multiple database names. This indicated to DBDGEN that a shared secondary index database was being defined. The segments in a shared secondary index must have the same physical characteristics. This includes the position of the sequence field in each segment.

Programmer Response: Ensure that each FIELD statement defining a sequence field for a segment in a shared secondary index has START and BYTES operands equal to the START and BYTES operands of the other FIELD statements defining sequence fields.

FLD999 START + BYTES - 1 EXCEEDS CONCATENATED KEY LENGTH CONCATENATED KEY LENGTH=length

Explanation: A /CK system related field was specified to describe a portion of the concatenated key of this index source segment, but with the values specified in the START and BYTES operands, this system related field is not within the concatenated key of this index source segment.

System Action: The specified operand information is used in subsequent validity checking.

Programmer Response: Correct the error, and rerun DBDGEN.

LCHD100 SEGM STATEMENT MUST PRECEDE LCHILD STMT

Explanation: The input sequence of DBDGEN requires that a SEGM statement must precede an LCHILD statement.

System Action: There is no default given.

Programmer Response: Correct the error, and rerun DBDGEN.

LCHD110 LCHILD SPECIFICATION LIMIT EXCEEDED

Explanation: More than the permissible limit of 255 LCHILD or logical child SEGM statements has been specified.

System Action: The 255th LCHILD value is continually overlaid by any other LCHILD statements that are processed. The final 255th value is the value of the last LCHILD statement processed.

Programmer Response: Correct the error, and rerun DBDGEN.

LCHD120 NAME OPERAND IS OMITTED OR INVALID

Explanation: Either the NAME operand was not specified or the specified operand names were longer than 8 characters or had invalid character contents.

System Action: The specified value is used for validity checking. If the operand was omitted, a null value is used.

Programmer Response: Correct the NAME operand on this LCHILD statement, and rerun DBDGEN.

LCHD130 DATABASE NAME PARAMETER IS INVALID

Explanation: One of the following occurred:

- The entered database name parameter of the NAME operand has invalid character content.
- The entered database name invalidly references the database containing this LCHILD statement.

System Action: The specified operand information is used in subsequent validity checking.

Programmer Response: Correct the database name parameter or the PTR operand parameter, and rerun DBDGEN.

LCHD140 POINTER OR PTR OPERAND IS INVALID

Explanation: One of the following occurred:

- Both the POINTER and PTR operands were specified.
- The POINTER or the PTR operand contains an invalid value as related to the access method defined for this DBD.
- The POINTER or the PTR operand contains an invalid value as related to the relationship currently being described within this DBD.

System Action: The value specified is used to validate following parameters.

Programmer Response: Correct the POINTER/PTR operand, and rerun DBDGEN.

LCHD150 PAIR OPERAND IS INVALID

Explanation: The value specified in the PAIR operand is greater than 8 characters.

System Action: The value specified is used to validate the following parameters.

Programmer Response: Correct the PAIR operand, and rerun DBDGEN.

LCHD160 INDEX OPERAND IS INVALID

Explanation: One of the following occurred:

- ACCESS=INDEX appears on the DBD statement, but the LCHILD INDEX operand has been omitted.
- ACCESS=INDEX does not appear on the DBD statement, but the LCHILD INDEX operand has been specified.
- The INDEX operand has been specified with the PAIR operand.
- The INDEX operand exceeds 8 characters.

System Action: Processing of the LCHILD statement is terminated. The remaining statements are scanned for validity.

Programmer Response: Correct the INDEX operand, and rerun DBDGEN.

LCHD170 LCHILD STMT INVALID FOR LOGICAL SEGMENTS

Explanation: If the SEGM statement specifies the SOURCE operand, no LCHILD statement can be specified for that SEGM.

System Action: The specified LCHILD operand information is used in subsequent validity checking.

Programmer Response: Correct the error, and rerun DBDGEN.

LCHD180 A LOGICAL CHILD SEGMENT CANNOT BE A LOGICAL PARENT OR BE INDEXED.

Explanation: Segments with a logical parent cannot also have logical children. If the SEGM statement specifies a logical parent segment name in the PARENT

operand, no LCHILD statements for index or logical relationships can be specified for that SEGM.

Programmer Response: Remove the LCHILD statements, or do not specify a logical parent name and rerun DBDGEN.

LCHD190 RULES OPERAND IS INVALID; DEFAULT ASSUMED

Explanation: This is a warning message. The RULES operand must specify a value of FIRST, LAST, or HERE.

System Action: Default rules value of LAST is used.

Programmer Response: Correct the RULES operand if a value other than LAST is desired, and rerun DBDGEN.

LCHD200 REFERENCED LCHILD CANNOT PRECEDE LCHILD STMT

Explanation: The segment name specified in the NAME operand of this LCHILD statement cannot be the same as the segment name specified in the NAME operand of the immediately preceding SEGM statement. That is, the segment cannot be a logical child of itself.

Programmer Response: Correct the NAME operand in the LCHILD statement, and rerun DBDGEN.

LCHD205 NAME OPERAND CANNOT REFERENCE THE SAME SEGMENT AS THE LCHILD STATEMENT UNDER SEGMENT name

Explanation: The NAME operand of this LCHILD statement cannot reference the same segment name and database as the LCHILD statement under the referenced segment.

System Action: The specified operand information is used in subsequent validity checking.

Programmer Response: Correct the error, and rerun DBDGEN.

LCHD210 LCHILD STATEMENT IS INVALID

Explanation: An LCHILD statement is not valid for a DBD which defined ACCESS=SHISAM.

System Action: Succeeding LCHILD parameters are not checked. The remaining DBDGEN statements are scanned for validity.

Programmer Response: Remove the LCHILD statement, or change the ACCESS operand on the DBD statement, and rerun DBDGEN.

LCHD215 LCHILD STATEMENT FOR PRIMARY HIDAM INDEX MUST PRECEDE ALL SECONDARY INDEX LCHILD STATEMENTS

Explanation: The LCHILD statement for the primary HIDAM index with PTR=INDX must precede all secondary index LCHILD statements with PTR=SYMB.

System Action: The specified operand information is used in subsequent validity checking.

Programmer Response: Correct the error, and rerun DBDGEN.

LCHD300 LCHILD STMT IS INVALID FOR access DBDS

Explanation: The LCHILD statement was specified for an invalid database type.

System Action: DBDGEN ignores all operands specified on the LCHILD statement and continues to process the remaining statements.

Programmer Response: Remove the LCHILD statement from the DBDGEN input stream or change the DL/I database organization, and rerun DBDGEN.

LCHD320 RKSIZE NOT VALID

Explanation: The RKSIZE operand was either not defined for an ACCESS=PSINDEX database or the operand was defined for a database organization other than ACCESS=PSINDEX.

System Action: DBDGEN is terminated. Subsequent statement validation will continue.

Programmer Response: Remove the RKSIZE operand or change the ACCESS parameter to one of the allowed organizations.

SEGM100 PRIOR DATASET/AREA STATEMENT IS MISSING OR INVALID

Explanation: A prior DATASET/AREA statement which is required for the database type being created was not specified. Or, a LOGICAL DATASET statement was specified, but this is not a LOGICAL database.

System Action: No DATASET/AREA parameters are assumed. Unpredictable results can occur in subsequent checking.

Programmer Response: Correct the error, and rerun DBDGEN.

SEGM105 MULTI-SEGMENT SHSAM DATA BASE SHOULD SPECIFY ACCESS=HSAM IN ITS DBD

Explanation: ACCESS=SHSAM was specified on the DBD statement, but more than one SEGM statement was specified.

System Action: This multisegment SHSAM database is treated like an HSAM database.

Programmer Response: Correct the error, and rerun DBDGEN.

SEGM110 SEGM SPECIFICATION LIMIT EXCEEDED

Explanation: One of the following occurred:

- More than 255 SEGM statements were provided.
- ACCESS=SHISAM was specified on the DBD statement, but more than one SEGM statement was specified.
- ACCESS=HISAM was specified on the DBD statement and the DATASET statement did not specify an OVFLW operand, but more than one SEGM statement was specified.
- ACCESS=INDEX was specified on the DBD statement, but more SEGM statements than there were database names specified on the NAME operand of the DBD statement were specified.
- ACCESS=MSDB or ACCESS=DEDB was specified on the DBD statement, but more than one SEGM statement was specified for MSDB, or more than two SEGM statements were specified for DEDB.

System Action: The information on this SEGM statement can overlay the prior SEGM statement. Unpredictable results can occur in subsequent validity checking.

Programmer Response: Correct the error, and rerun DBDGEN.

SEGM120 NAME OPERAND IS OMITTED OR INVALID

Explanation: The NAME operand is required and must be a 1- to 8-character alphanumeric value, #, @ or $.

System Action: The specified name is used for validity checking. If it is omitted, a null value is inserted.

Programmer Response: Correct the NAME operand, and rerun DBDGEN.

SEGM130 POSITIONAL PARAMETERS ARE INVALID FOR SEGM

Explanation: You coded a positional parameter in a macro that will only accept keywords. An equal or a parenthesis sign is missing, or a keypunch error occurred.

System Action: Terminate the DBDGEN prior to expansion.

Programmer Response: Remove the positional parameter, and rerun the DBDGEN.

SEGM140 SEGMENT NAME IS A DUPLICATE NAME

Explanation: The value specified in the NAME operand is a duplicate of one specified on a SEGM statement elsewhere in this DBDGEN. This is not permitted.

System Action: The name is used as many times as it is specified for validity checking.

Programmer Response: Change the segment name, and rerun DBDGEN.

SEGM150 PHYSICAL PARENT PARAMETER IS OMITTED OR INVALID

Explanation: One of the following occurred:

- More parameters were specified than are valid for the syntax of this operand.
- The SNGL/DBLE option was specified for a root segment or a segment in an INDEX or DEDB database. Or, the SNGL/DBLE option for a dependent segment was incorrectly specified.
- The PARENT operand for a root segment was specified, but specified as PARENT=0.

System Action: The value given is used for further validity checking. If none is given, a null value is assumed.

Programmer Response: Correct the PARENT operand, and rerun DBDGEN.

SEGM160 PHYSICAL PARENT PARAMETER IS INVALID

Explanation: The physical parent name was omitted or specified as 0 for a dependent segment.

System Action: The value given is used in subsequent validity checking. If none is given, a null value is assumed.

Programmer Response: Correct the PARENT operand, and rerun DBDGEN.

SEGM170 SEGMENT PHYSICAL PARENT IS NOT DEFINED

Explanation: The segment name specified in the PARENT operand has not been defined in a previous SEGM statement NAME operand.

System Action: The name specified is used for validity checking.

Programmer Response: Correct the PARENT operand to specify a valid parent segment, and rerun DBDGEN.

SEGM180 IF SOURCE SEGMENT OPERAND IS SPECIFIED, ALL OTHER OPERANDS ARE INVALID EXCEPT THE SEGMENT NAME, PARENT NAME, AND PTR=PAIRED (FOR VIRTUAL LOGICAL CHILDREN) PARAMETERS

Explanation: Self-explanatory.

System Action: Processing on the SEGM statement is terminated. The following DBDGEN statements are processed for validity. DBDGEN is terminated prior to expansion of the DBDGEN macro.

Programmer Response: Remove the invalid operands, and rerun DBDGEN.

SEGM190 LOGICAL PARENT PARAMETER IS INVALID

Explanation: One of the following occurred:

- The logical parent name of the PARENT operand was omitted.
- A value other than VIRTUAL, V, PHYSICAL, or P was specified for the second subparameter.
- A logical parent was specified for a root segment, or a segment in an INDEX or DEDB database.

System Action: The specified operand information is used in subsequent validity checking.

Programmer Response: Correct the logical parent parameter, and rerun DBDGEN.

SEGM195 VIRTUAL DEFAULTED TO PHYSICAL FOR ACCESS=

Explanation: This is an informational message which indicates that only PHYSICAL is supported for HALDBs.

System Action: VIRTUAL is ignored and PHYSICAL is used.

Programmer Response: No response is necessary. You can remove the message from DBDGEN output by changing the VIRTUAL specification to PHYSICAL.

SEGM200 LOGICAL PARENT DBNAME IS INVALID—name

Explanation: The entered logical parent database name does not begin with an alpha character or contains more than 8 characters.

System Action: The entered name is used.

Programmer Response: Correct the logical parent database name in the PARENT operand, and rerun DBDGEN.

SEGM210 BYTES OPERAND IS OMITTED OR INVALID

Explanation: One of the following occurred.

- The BYTES operand was omitted or more than two parameters have been specified or the parameter values are not self-defining.
- The maximum bytes value exceeds 32767.
- The minimum bytes value exceeds the maximum bytes value, or has been specified for a SHISAM or INDEX database, or a database without VSAM.
- If ACCESS=MSDB was specified on the DBD statement, the minimum bytes value was specified, or only the maximum bytes value was specified but it is not an unsigned decimal number which is a multiple of 4.
- If ACCESS=DEDB was specified on the DBD statement, both the minimum and maximum bytes values have not been specified, or the minimum bytes value is less than 4.
- If `ACCESS=DEDB` was specified on the DBD statement, the `BYTES=` value specified is less than 4.

System Action: The specified operand information can be used for subsequent validity checking or a value of zero can be assumed.

Programmer Response: Correct the BYTES operand, and rerun DBDGEN.

SEGM211 BYTES OPERAND FOR MULTI-INDEX DBDGENS MUST BE EQUAL ON ALL SEGM STATEMENTS

Explanation: A shared secondary index database with segments of different lengths was specified.

System Action: The specified operand information is used in subsequent validity checking.

Programmer Response: Correct the error, and rerun DBDGEN.

SEGM220 FREQ OPERAND IS INVALID

Explanation: The FREQ operand must be an unsigned decimal number in the range 0.01 to (2^{24} -1).

System Action: No default is assumed, if the operand is omitted.

Programmer Response: Correct the FREQ operand, and rerun DBDGEN.

SEGM240 ptrparm CHANGED TO TWINBWD FOR access

Explanation: This is an informational message that is produced when POINTER=(HIER, or HIERBWD was specified on the SEGM statement for PHDAM or PHIDAM. Hierarchic pointing is not valid for HALDBs.

System Action: POINTER=(TWINBWD,...) is used.

Programmer Response: No response is necessary. You can remove the message from DBDGEN output by changing the pointer specification to TWIN, TWINBWD, or NOTWIN.

SEGM250 POINTER AND PTR OPERANDS ARE EXCLUSIVE

Explanation: PTR is the abbreviation for the POINTER operand, and this operand can only be specified once on each SEGM statement.

System Action: Further scan of the SEGM statement is terminated. The remaining DBDGEN statements are scanned for validity. The DBDGEN is terminated prior to expansion of the DBDGEN macro.

Programmer Response: Specify PTR or POINTER, and rerun DBDGEN.

SEGM260 SEGMENT SIZE EXCEEDS SPECIFIED BLOCK SIZE

Explanation: The length specified in the BYTES operand on the SEGM statement exceeds the length specified in the BLOCK/SIZE operand on the DATASET statement.

System Action: The value specified in the BYTES operand is used for validity checking.

Programmer Response: Reduce the length specified in the BYTES operand, and rerun DBDGEN.

SEGM270 POINTER OR PTR OPERAND CONTAINS INVALID OR CONFLICTING KEYWORD VALUES

Explanation: Self-explanatory.

System Action: The scan of the PTR operand is terminated at the point the error is detected.

Programmer Response: Correct the POINTER operand, and rerun DBDGEN.

SEGM280 RULES OPERAND IS INVALID

Explanation: One of the following occurred:

- More than one RULES operand was specified on this SEGM statement.
- The first parameter was not equal to the value of P, L, V, or B.
- The first parameter contained more than three characters.
- The second parameter was not equal to the value FIRST, LAST, or HERE.

System Action: The scan of the RULES operand is terminated at the point the error is detected.

Programmer Response: Correct the RULES operand, and rerun DBDGEN.

SEGM285 POINTER OPTIONS PTR=LT/LTB/LPARNT REQUIRE THAT THE SEGMENT BE A LOGICAL CHILD

Explanation: Self-explanatory.

System Action: The specified operand information is used in subsequent validity checking.

Programmer Response: Correct the error, and rerun the DBDGEN. Exercise caution if this error is corrected for the DBD of an existing base, since the description of the prefix of this segment in the new DBD might be different from its description in the old DBD. Consequently, usage of the new DBD against the existing database might be invalid.

SEGM290 SEGMENT LENGTH IS GREATER THAN SPECIFIED RECORD LENGTH PLUS ROOT SEGMENT KEY

Explanation: The length specified in the BYTES operand on the SEGM statement exceeds the length specified in the RECORD operand on the DATASET statement.

Programmer Response: Correct the erroneous operand, and rerun DBDGEN.

SEGM300 SOURCE SEGMENT IS INVALID FOR INDEX DBD'S

Explanation: Either a SOURCE operand is specified for an index segment in an index database, or more than two segments were specified in the SOURCE operand.

Programmer Response: Correct the SOURCE operand, and rerun DBDGEN.

SEGM302 SOURCE OPERAND IS INVALID FOR access DBDS

Explanation: The SOURCE operand was specified for a database type that does not allow the specification of this operand.

System Action: The user specified SOURCE operand information is used in subsequent validity checking. Unpredictable results can occur in the following validity checking.

Programmer Response: Correct the error, and rerun DBDGEN.

SEGM305 EXCESSIVE SUBLISTS SPECIFIED IN SOURCE= OPERAND; SYNTAX: SOURCE=((...)) OR SOURCE=((...),(...))

Explanation: The SOURCE operand has a maximum of two sublists to describe up to two source segments. More than two sublists or a second sublist for other than a DL/I organization of LOGICAL was specified. Only one sublist can be specified when defining a virtual logical child.

System Action: The SOURCE operand information as specified by the user is used in subsequent validity checking.

Programmer Response: Correct the error, and rerun DBDGEN.

SEGM310 SOURCE OPERAND MUST BE SPECIFIED FOR A LOGICAL DBD

Explanation: ACCESS=LOGICAL was specified on the DBD statement, but the SOURCE operand was not specified on this SEGM statement.

System Action: No default is assumed. Unpredictable results can occur in subsequent validity checking.

Programmer Response: Correct the error, and rerun DBDGEN.

SEGM315 THE PARENT OF THIS SEGMENT CANNOT BE A LOGICAL SEGMENT

Explanation: The parent of this segment is a virtual logical child segment. It is invalid for a virtual logical child segment to have children.

System Action: The given operand information is used in subsequent validity checking.

Programmer Response: Correct the error, and rerun DBDGEN.

SEGM320 HIERARCHY SEQUENCE ERROR

Explanation: The named PARENT operand of the current segment violated hierarchic sequence. The maximum number of segment levels might have been exceeded.

System Action: The specified PARENT operand might be in error or is ignored because the hierarchic sequence was incorrect. Some unpredictable results might occur in subsequent validity checking.

Programmer Response: Check the PARENT operand for a possible error, correct the hierarchic sequence, and rerun DBDGEN.

SEGM330 SEGMENT name LENGTH PLUS PREFIX—n IS GREATER THAN SPECIFIED RECORD LENGTH

Explanation: The length specified in the SEGM BYTES operand plus the length of the segment prefix is greater than the record length specified in the RECORD operand on the DATASET statement.

System Action: The specified operand information is used in subsequent validity checking.

Programmer Response: Correct the erroneous length, and rerun DBDGEN.

SEGM340 SEGMENT name LENGTH PLUS PREFIX—n EXCEEDS SPECIFIED BLOCK/CI SIZE

Explanation: The length specified in the SEGM BYTES operand plus the length of the segment prefix is greater than the block/CI size specified in the BLOCK/SIZE operand on the DATASET statement.

System Action: The specified operand information is used in subsequent validity checking.

Programmer Response: Correct the erroneous length, and rerun DBDGEN.

SEGM350 SEGMENT (name) SIZE EXCEEDS {TRACK LENGTH|CI SIZE}. SEGMENT SIZE=n {TRACK LENGTH=n| MAXIMUM CI SIZE=32256}

Explanation: The length specified in the bytes operand cannot exceed the smaller of 32K bytes, the track length of the device specified in the DEVICE/MODEL operand on the DATASET statement, or the maximum control interval size for a VSAM data set.

Programmer Response: Reduce the length specified in the BYTES operand, and rerun DBDGEN.

SEGM351 SEGMENT (name) SIZE EXCEEDS MAXIMUM CI SIZE MINUS VSAM OVERHEAD. SEGMENT SIZE=n MAXIMUM ALLOWED=30713

Explanation: The length specified in the SEGM BYTES operand plus the length of the segment prefix exceeds the maximum usable control interval size of 30720-7 for a VSAM data set.

System Action: The specified operand information is used in subsequent validity checking.

Programmer Response: Correct the error, and rerun DBDGEN.

SEGM352 SEGMENT (name) SIZE EXCEEDS MAXIMUM BLOCK ALLOWED. SEGMENT SIZE=n MAXIMUM BLOCK=m

Explanation: The length specified in the SEGM BYTES operand plus the length of the segment prefix exceeds the maximum (keyed or nonkeyed) block on a track of the device specified in the DEVICE/MODEL operand on the DATASET statement.

System Action: The specified operand information is used in subsequent validity checking.

Programmer Response: Correct the error, and rerun DBDGEN.

SEGM354 SEGMENT (name) SIZE EXCEEDS LIMIT. SEGMENT SIZE=n MAXIMUM LIMIT=m

Explanation: The length specified in the BYTES operand for an MSDB exceeds the maximum allowable.

System Action: The specified operand information is used in subsequent validity checking.

Programmer Response: Correct the error, and rerun DBDGEN.

SEGM360 PHYSICAL PARENT MUST RESIDE IN THE SAME DATA SET GROUP AS ITS PHYSICAL CHILDREN

Explanation: This physical child segment cannot be in a different data set group from its physical parent, unless the physical parent is the root segment (HISAM database) or the physical parent does not specify HIER pointing in the POINTER operand on its SEGM statement (HDAM or HIDAM database).

System Action: The given operand information is used in subsequent validity checking.

Programmer Response: Correct the error, and rerun DBDGEN.

SEGM380 CHILD MUST CONTAIN SAME NUMBER OF PHYSICAL TWIN POINTER AS ITS PARENT

Explanation: If the parent segment specified POINTER=HIER, the child segment must specify POINTER=HIER or POINTER=TWIN. If the parent segment specified POINTER=HIERBWD, the child segment must specify POINTER=HIERBWD or POINTER=TWINBWD.

System Action: The specified operand information is used in subsequent validity checking.

Programmer Response: Correct the error, and rerun DBDGEN.

SEGM400 {SNGL|DBLE} PTR FROM HIERARCHICAL PARENT IS IGNORED

Explanation: If the parent segment specifies PTR=HIER or PTR=HIERBWD, then the SEGM statement for the child segment cannot specify SNGL or DBLE in the PARENT operand.

SEGM410 INVALID OR INCOMPLETE SEGMENT PAIRING

Explanation: The PTR operand on the SEGM statement specified PAIRED. One of the following occurred:

- Its parent does not have an LCHILD statement naming it in the LCHILD's PAIR operand.
- The parent segment has no associated LCHILD statement.
- The segment is the root segment.

System Action: No default is assumed. The available operand information is used in subsequent validity checking.

Programmer Response: Correct the error, and rerun DBDGEN.

SEGM415 SEGM SOURCE= OPERAND MUST SPECIFY SAME NAME AS PAIRED LCHILD NAME= OPERAND

Explanation: The logical child name in the SOURCE operand of this SEGM statement must specify the same segment name and database as the paired LCHILD NAME operand.

System Action: The specified operand information is used in subsequent validity checking.

Programmer Response: Correct the incorrect operand name value, and rerun DBDGEN.

SEGM420 LCHILD STMT—name—MUST [NOT] SPECIFY POINTERS WHEN PAIRED WITH A {PHYSICAL|LOGICAL} SEGMENT

Explanation: The following conditions apply to an LCHILD statement paired with a virtual logical child:

- POINTER=SNGL or POINTER=DBLE must be specified.
- The paired segment specifies the SOURCE operand.
- SNGL is the default when POINTER is not specified.

The following conditions apply to an LCHILD statement paired with a real logical child:

- POINTER=NONE must be specified.
- The paired segment does not specify the SOURCE operand.
- NONE is the default when POINTER is not specified.

System Action: If the paired segment has the SOURCE operand specified, SNGL is assumed. Otherwise, the specified operand information on the control statements is used in subsequent validity checking.

Programmer Response: Correct the error, and rerun DBDGEN. If this error is corrected for the DBD of an existing database, you might wish to ensure that the prefix of the logical parent in the new DBD is the same as in the old DBD. In particular, be aware that if the erroneous LCHILD statement specified PTR=NONE or omitted the PTR operand, a counter field (CTR) was implicitly placed in the prefix of the logical parent of the old DBD.

SEGM430 PTR/POINTER OPERAND IS INVALID

Explanation: The POINTER/PTR operand cannot be specified on a SEGM statement within a DBD where the ACCESS operand specified HSAM, SHSAM, or SHISAM.

System Action: Terminate any further scanning of the SEGM statement.

Programmer Response: Correct the PTR/POINTER operand, and rerun DBDGEN.

SEGM440 COMPRTN OPERAND IS INVALID

Explanation: One of the following occurred:

- The operand was specified for a dependent segment which participates in a logical relationship.
- The operand was specified without VSAM as the system access method.
- The operand was specified for a DBD which had defined ACCESS=INDEX or ACCESS=SHISAM.
- KEY parameter is invalid for ACCESS=DEDB.
- KEY compression was specified for the root segment of a HISAM DBD.
- More than three parameters were specified.
- The first parameter has invalid character content.
- The second parameter was specified, but was not specified as KEY or DATA.
- The third parameter was specified, but was not specified as INIT.

System Action: The scan of the COMPRTN is terminated at the point the error is detected.

Programmer Response: Correct the COMPRTN operand, and rerun DBDGEN.

SEGM450 SEGMENT NAME IS INVALID FOR COMPRESSION

Explanation: A segment name which is a duplicate of one of the internally used DBD labels was specified.

System Action: The specified operand information is used in subsequent validity checking.

Programmer Response: Change the segment name, and rerun DBDGEN.

SEGM460 INDEX SOURCE SEGMENT IS A LOGICAL SEGMENT. REFERENCE XDFLD STATEMENT NAME—name

Explanation: The XDFLD statement referenced above specifies this logical child segment as the index source segment. This is invalid.

System Action: The specified operand information is used in subsequent validity checking.

Programmer Response: Correct the error, and rerun DBDGEN.

SEGM470 SEGM STMT IS NOT APPLICABLE TO GSAM.

Explanation: The SEGM control statement is not allowed for a DBDGEN with ACCESS=GSAM.

System Action: DBDGEN is terminated because of the control statement error.

Programmer Response: Correct the error, and resubmit the job.

SEGM475 PHYSICAL PARENT OF THIS LOGICAL CHILD CANNOT ALSO BE A LOGICAL CHILD.

Explanation: This logical child segment has a physical parent which is also a logical child segment. This is not allowed.

System Action: The specified operand information is used in subsequent validity checking.

Programmer Response: Correct the error, and rerun DBDGEN.

SEGM480 WARNING: THIS LOGICAL CHILD SEGMENT HAS A NON-VIRTUAL DELETE RULE. THIS MAY CAUSE DL/I DELETE PROCESSING TO ORPHAN LOGICAL CHILDREN THAT EXIST HIERARCHICALLY ABOVE THIS SEGMENT.

Explanation: This is a warning message. See the "Insert, Delete, and Replace Rules for Logical Relationships" section of *IMS Version 9: Administration Guide: Database Manager* for a discussion of the use of the DL/I delete rules.

System Action: DBDGEN continues with a warning message.

Programmer Response: If you do not want to restore the logical relationships of the segment, change the delete rules to virtual and rerun the job.

SEGM500 INVALID KEYWORD PARAMETERS SPECIFIED FOR ACCESS={MSDB|DEDB}

Explanation: One of the following occurred:

- An invalid operand was specified on the SEGM statement for ACCESS=MSDB. The valid operands for this statement are NAME and BYTES.
- An invalid operand was specified on the SEGM statement for ACCESS=DEDB. The valid operands for this statement are NAME, PARENT, BYTES and TYPE.
- The COMPRTN operand is invalid for ACCESS=MSDB.

System Action: The system continues to process the parameter on the SEGM statement and the remaining statements.

Programmer Response: Remove any invalid operands from the SEGM statement, and rerun the DBDGEN.

SEGM510 TYPE OPERAND IS INVALID.

Explanation: The TYPE= operand contains an invalid value or was inappropriately specified. The valid value for this operand is SEQ.

System Action: The system continues to process the parameter on the SEGM statement and the remaining statements.

Programmer Response: Correct the TYPE operand, and rerun the DBDGEN.

SEGM520 SEGM SIZE EXCEEDS SPECIFIED CI SIZE. SEGM SIZE=nnn CI SIZE-120=nnn

Explanation: The length specified in the first parameter of the BYTES operand exceeds the length specified in the SIZE operand on the AREA statement minus 120.

System Action: The system continues to process the parameter on the SEGM statement and the remaining statements.

Programmer Response: Correct the BYTES operand, and rerun the DBDGEN.

SEGM530 INVALID SEGM LEVEL SPECIFIED FOR DEDB DBDS. THE LEVEL LIMIT IS 2.

Explanation: An invalid segment hierarchical structure was specified in the SEGM statement for DEDB DBDs.

System Action: The system continues to process the remaining statements.

Programmer Response: Correct the PARENT operand, and rerun the DBDGEN.

SEGM540 SUBSET POINTER IS NOT SUPPORTED

Explanation: One of the following occurred:

1. The SSPTR operand is specified to the non-DEDB database.
2. The segment is a root segment or a sequential dependent segment.
3. The value specified in the SSPTR operand is not greater than or equal to 0 and less than or equal to 8.

System Action: The specified operand information is used in subsequent validity checking.

Programmer Response: Correct the error, and rerun DBDGEN.

SEGM700 xxxxxxxx IGNORED FOR EXIT yyyyyyyy BECAUSE zzzzzzzz ALREADY SPECIFIED

Explanation: Exit option xxxxxxxx was specified on the SEGM statement for exit yyyyyyyy, but the option is ignored because the zzzzzzzz option is contradictory. The zzzzzzz option is used.

System Action: Processing continues with RC=4.

Programmer Response: Correct the EXIT specification on the SEGM statement.

Problem Determination: 2, 3, 8 and 18.

SEGM750 EXIT NOT SUPPORTED FOR DB ORGANIZATION. HDAM, HIDAM, DEDB, HISAM, OR SHISAM DATA BASE ORGANIZATION IS REQUIRED

Explanation: An EXIT= parameter was specified on the DBD statement for a database organization that is not supported.

System Action: Processing terminates with RC=8.

Programmer Response: Correct the EXIT specification on the SEGM statement.

Problem Determination: 2, 3, 8 and 18.

SEGM755 EXIT NAME xxxxxx IS INVALID

Explanation: An EXIT= parameter was specified on the SEGM statement with the exit name xxxxxxxx, but the name is not a valid module name. The exit name length is greater than 8 bytes or the first character is not alphabetic.

System Action: Processing terminates with RC=8.

Programmer Response: Correct the EXIT specification on the SEGM statement.

Problem Determination: 2, 3, 8 and 18.

SEGM760 xxxxxxxx EXIT OPTION SPECIFIED FOR EXIT yyyyyyyy IS NOT A VALID OPTION. KEY, NOKEY, DATA, NODATA, PATH, NOPATH, CASCADE, NOCASCADE ARE VALID OPTIONS

Explanation: An EXIT= parameter was specified on the SEGM statement with the invalid option xxxxxxxx.

System Action: Processing terminates with RC=8.

Programmer Response: Correct the EXIT specification on the SEGM statement.

Problem Determination: 2, 3, 8 and 18.

SEGM765 xxxxxxxx EXIT CASCADE OPTION SPECIFIED FOR EXIT yyyyyyyy IS NOT A VALID OPTION. KEY, NOKEY, DATA, NODATA, PATH, NOPATH ARE VALID OPTIONS

Explanation: An EXIT= parameter was specified on the SEGM statement with the invalid option xxxxxxxx for CASCADE.

System Action: Processing terminates with RC=8.

Programmer Response: Correct the EXIT specification on the SEGM statement.

Problem Determination: 2, 3, 8 and 18.

SEGM770 EXIT SPECIFICATION ON SEGM NOT VALID FOR SEGM xxxxxxxx BECAUSE yyyyyyyy ARE NOT SUPPORTED

Explanation: An EXIT= parameter was specified on the SEGM statement for segment xxxxxxxx, but the segment type is not supported because yyyyyyyy segments are not supported.

System Action: Processing terminates with RC=8.

Programmer Response: Correct the EXIT specification on the SEGM statement.

Problem Determination: 2, 3, 8 and 18.

SEGM780 EXIT SPECIFICATION ON DBD IGNORED FOR SEGMENT xxxxxxxx BECAUSE VIRTUAL LOGICAL CHILDREN ARE NOT SUPPORTED. SPECIFY EXIT=NONE TO ELIMINATE THE WARNING

Explanation: An EXIT= parameter was specified on the DBD statement, but the exit is ignored for segment xxxxxxxx because virtual logical children are not supported. The warning message can be suppressed by specifying EXIT=NONE for the segment.

System Action: Processing continues with RC=4.

Programmer Response: Correct the EXIT specification on the SEGM statement.

Problem Determination: 2, 3, 8 and 18.

SEGM810 DSGROUP SPECIFICATION IS NOT VALID

Explanation: The DSGROUP operand is not a valid specification. 'A' is the only valid specification on the root segment. Single character operands 'A' through 'J' are the only specifications allowed.

System Action: DBDGEN terminates. Subsequent statement validation continues.

Programmer Response: Correct the DSGROUP specification and reprocess the DBDGEN.

SEGM820 DSGROUP KEYWORD NOT VALID FOR ACCESS=

Explanation: The DSGROUP operand is only valid for ACCESS=PHDAM and PHIDAM.

System Action: DBDGEN terminates. Subsequent statement validation continues.

Programmer Response: Remove the DSGROUP specification or change the ACCESS parameter to one of the allowed organizations.

SEGM830 DSGROUP SPECIFICATION MUST BE CONTIGUOUS A-J.

Explanation: Gaps are not allowed in the specification of multiple data set groups in HALDBs. For example, if data set group 'D' is defined on a SEGM statement, then data set groups 'B' and 'C' must also be defined.

System Action: DBDGEN terminates.

Programmer Response: Correct the DSGROUP specifications and reprocess the DBDGEN.

SEGM840 SOURCE= SPECIFICATION NOT ALLOWED FOR ACCESS=

Explanation: Virtual pairing is not supported in HALDBs. The SOURCE= specification for virtual pairing is not valid on SEGM statements for PHDAM and PHIDAM.

System Action: DBDGEN terminates.

Programmer Response: Correct the error specification and reprocess the DBDGEN.

SOUR100 SOURCE SEGMENT TABLE LIMIT EXCEEDED

Explanation: The size of the table which is used to contain SEGM SOURCE operand values and XDFLD SRCH, DDATA, SUBSEQ, EXTRTN, and NULLVAL operand values has been exceeded.

System Action: The SEGM SOURCE operand value which caused the table overflow is ignored.

Programmer Response: Reduce the number of operand values, and rerun the DBDGEN.

SOUR110 SOURCE SEGMENT NAME IS OMITTED

Explanation: The segment name parameter has been omitted from the SOURCE operand on the SEGM statement.

System Action: The remaining source operand values are scanned for validity.

Programmer Response: Provide a segment name, and rerun DBDGEN.

SOUR120 SOURCE SEGMENT DATA OPTION IS INVALID OPTION=opt

Explanation: The DATA parameter in the SOURCE operand on the SEGM statement is invalid, because it does not specify KEY or DATA.

System Action: The remaining source operand values are scanned for validity.

Programmer Response: Correct the SOURCE operand, and rerun DBDGEN.

SOUR130 SOURCE SEGMENT DATABASE IS INVALID—name

Explanation: The entered database name (dbname) parameter in the SOURCE operand on the SEGM statement is invalid, because it is the same as the name on the DBD statement, or because it has invalid character content.

System Action: The remaining source operand values are scanned for validity.

Programmer Response: Correct the dbname parameter on the SOURCE operand.

SOUR140 A SOURCE SEGMENT OPTION OF DATA SHOULD BE SPECIFIED WHEN DEFINING A VIRTUAL LOGICAL CHILD SEGM

Explanation: This is a warning message.

XDFLD001 XDFLD STATEMENT INVALID FOR HSAM, INDEX, AND (HISAM,ISAM) MULTIPLE DATA SET DBDS

Explanation: An XDFLD statement is invalid when the access method specified for the DBD generation is HSAM or INDEX.

Programmer Response: Remove the XDFLD statement and rerun DBDGEN.

XDFLD002 SECONDARY INDEX LCHILD STATEMENT WITH PTR=INDX/SYMB MUST PRECEDE THIS XDFLD STATEMENT.

Explanation: This XDFLD statement must be paired to a preceding LCHILD statement which has a POINTER value of INDX or SYMB. This required LCHILD statement is missing.

System Action: The specified XDFLD operand information is used in subsequent validity checking.

Programmer Response: Correct the error, and rerun DBDGEN.

XDFLD003 SEGM CARD MUST PRECEDE XDLFD CARD

Explanation: The input sequence of DBDGEN requires that a SEGM statement must precede an XDFLD statement.

System Action: There is no default given.

Programmer Response: Correct the error, and rerun DBDGEN.

XDFLD004 NAME OPERAND IS OMITTED OR INVALID

Explanation: One of the following occurred:

- The NAME operand was not specified.
- More than one parameter was specified.
- The specified operand contained more than 8 characters, or had invalid character content.

Programmer Response: Correct the NAME operand, and rerun DBDGEN.

XDFLD005 SRCH OPERAND IS OMITTED OR INVALID

Explanation: One of the following occurred:

- The SRCH operand was not specified.
- More than five parameters were specified.
- A specified parameter contained more than 8 characters.
- A system related field was specified.

Programmer Response: Correct the SRCH operand, and rerun DBDGEN.

XDFLD006 SUBSEQ OPERAND IS INVALID

Explanation: Either more than five parameters were specified, or a specified parameter contained more than 8 characters.

Programmer Response: Correct the SUBSEQ operand, and rerun DBDGEN.

XDFLD007 DDATA OPERAND IS INVALID

Explanation: Either more than five parameters were specified, or a specified parameter contained more than 8 characters, or a /SX system related field was specified.

Programmer Response: Correct the DDATA operand, and rerun DBDGEN.

XDFLD008 EXTRTN OPERAND IS INVALID

Explanation: One of the following occurred:

- More than one parameter was specified.
- The operand contains more than 8 characters, or has invalid character content.

Programmer Response: Correct the EXTRTN operand, and rerun DBDGEN.

XDFLD009 CONST OPERAND IS INVALID

Explanation: The CONST operand was not specified as a one-byte self-defining term. The CONST operand is not supported for HALDBs.

Programmer Response: Correct or delete the CONST operand and rerun DBDGEN.

XDFLD010 NULLVAL OPERAND IS INVALID

Explanation: The NULLVAL operand was not specified as a one byte self-defining term, zero, or blank.

Programmer Response: Correct the NULLVAL operand, and rerun DBDGEN.

XDFLD011 SEGMENT OPERAND IS INVALID

Explanation: Either more than one parameter was specified, or the specified parameter contains more than 8 characters.

Programmer Response: Correct the SEGMENT operand, and rerun DBDGEN.

XDFLD012 SRCH/DDATA/SUBSEQ/EXTRTN/ NULLVAL NAME TABLE LIMIT EXCEEDED

Explanation: The size of the table which is used to contain SEGM SOURCE operand values and XDFLD SRCH, DDATA, SUBSEQ, EXTRTN, and NULLVAL operand values has been exceeded.

System Action: The XDFLD operand value which caused the table overflow is ignored. Processing of this XDFLD statement is terminated.

Programmer Response: Reduce the number of operand values, and rerun DBDGEN.

XDFLD013 SEGMENT XDFLD LIMIT EXCEEDED

Explanation: Only 32 XDFLD statements are allowed for each SEGM statement.

Programmer Response: Reduce the number of XDFLD statements to less than or equal to 32, and rerun DBDGEN.

XDFLD014 SPECIFIED NAME MAY NOT BE THE OBJECT OF PREVIOUS XDFLD SRCH, DDATA, OR SUBSEQ

Explanation: The specified NAME operand is invalid, because it is a duplicate of a name that appeared in a previous XDFLD statement in the SRCH, DDATA, or SUBSEQ operand.

Programmer Response: Correct the NAME operand, and rerun DBDGEN.

XDFLD015 SEGMENT KEYWORD MAY NOT SPECIFY A PREVIOUSLY DEFINED SEGMENT NAME

Explanation: The segname specified in the SEGMENT operand must be the name of a subsequently defined segment type which is hierarchically below the index target segment type, or it can be the name of the index target segment type itself.

Programmer Response: Correct the SEGMENT operand, and rerun DBDGEN.

XDFLD016 SPECIFIED INDEX SOURCE SEGMENT NAME NOT FOUND. NAME EQUALS—name

Explanation: The segname specified in the SEGMENT operand could not be found.

Programmer Response: Correct the SEGMENT operand, and rerun DBDGEN.

XDFLD017 SPECIFIED SRCH FIELD NAME—name NON-EXISTENT IN INDEX SOURCE SEGMENT

Explanation: The value specified in the SRCH operand on the XDFLD statement could not be found on any of the FIELD statements for the index source segment defined in the SEGMENT operand.

Programmer Response: Correct the SRCH operand, and rerun DBDGEN.

XDFLD018 SPECIFIED SUBSEQ FIELD NAME—name NON-EXISTENT IN INDEX SOURCE SEGMENT

Explanation: The value specified in the SUBSEQ operand on the XDFLD statement could not be found on any of the FIELD statements for the index source

segment defined in the SEGMENT operand.

Programmer Response: Correct the SUBSEQ operand, and rerun DBDGEN.

XDFLD019 SPECIFIED DDATA FIELD NAME—name NON-EXISTENT IN INDEX SOURCE SEGMENT

Explanation: The value specified in the DDATA operand on the XDFLD statement could not be found on any of the FIELD statements for the index source segment defined in the SEGMENT operand.

Programmer Response: Correct the DDATA operand, and rerun DBDGEN.

XDFLD020 PREVIOUS LCHILD POINTER OPERAND INVALID

Explanation: PTR=SYMB was specified and the symbolic pointer to the index target segment is not unique.

Programmer Response: Correct the PTR operand on the LCHILD statement, and rerun DBDGEN.

XDFLD021 INDEX SOURCE SEGMENT (name) IS NOT HIERARCHICALLY BELOW INDEXED SEGMENT (name)

Explanation: The segname specified in this SEGMENT operand must be the name of a subsequently defined segment type which is hierarchically below the index target segment type, or it can be the name of the index target segment type itself.

Programmer Response: Correct the SEGMENT operand, and rerun DBDGEN.

XDFLD022 INDEX SOURCE SEGMENT IS A LOGICAL SEGMENT

Explanation: The segname specified in the SEGMENT operand must not be a logical child segment.

Programmer Response: Correct the SEGMENT operand, and rerun DBDGEN.

XDFLD023 XDFLD STATEMENT IS INVALID FOR A LOGICAL CHILD SEGMENT OR A PHYSICAL DEPENDENT OF A LOGICAL CHILD SEGMENT. REFERENCE SEGM STATEMENT name

Explanation: You specified secondary indexes for the referenced segment type. This is invalid.

System Action: DBDGEN terminates.

Programmer Response: Correct the SEGMENT name, and rerun DBDGEN.

XDFLD077 HDAM LCHILD STATEMENTS WITH POINTER=INDX MUST HAVE A CORRESPONDING XDFLD STATEMENT

Explanation: An HDAM LCHILD statement with PTR=INDX defines a secondary index relationship; following each LCHILD statement of this type there must be a corresponding XDFLD statement. This required XDFLD statement is missing.

System Action: No default is assumed. The user specified statements are used in subsequent validity checking.

Programmer Response: Correct the error, and rerun the DBDGEN.

XDFLD111 SPECIFIED SRCH FIELD NAME NON-EXISTENT. FIELD NAME EQUALS—name

Explanation: The value specified in the SRCH operand on the XDFLD statement could not be found on any of the FIELD statements in this DBD.

Programmer Response: Correct the SRCH operand, or provide a FIELD statement with the correct name, and rerun DBDGEN.

XDFLD112 SPECIFIED SUBSEQ FIELD NAME NON-EXISTENT. FIELD NAME EQUALS—name

Explanation: The value specified in the SUBSEQ operand on the XDFLD statement could not be found on any of the FIELD statements in the DBD.

System Action: None.

Programmer Response: Correct the SUBSEQ operand, or provide a FIELD statement with the correct name, and rerun DBDGEN.

XDFLD113 SPECIFIED DDATA FIELD NAME NON-EXISTENT. FIELD NAME EQUALS—name

Explanation: The value specified in the DDATA operand on this XDFLD statement could not be found on any of the FIELD statements in this DBD.

System Action: None.

Programmer Response: Correct the DDATA operand, or provide a FIELD statement with the correct name, and rerun DBDGEN.

XDFLD120 COMBINED LENGTH OF CONSTANT, SEARCH, AND SUBSEQUENCE FIELDS FOR XDFLD STATEMENT—name—EXCEEDS 240 BYTES

Explanation: The XDFLD statement named in the message has specified object fields whose combined length exceeds the maximum allowed.

System Action: None.

Programmer Response: Correct the error, and rerun DBDGEN.

XDFLD124 THIS XDFLD STATEMENT —name— REFERENCES ANOTHER XDFLD STATEMENT IN ITS SEARCH, SUBSEQUENCE, OR DUPLICATE DATA OPERAND

Explanation: The XDFLD statement named in the message has a SRCH operand object FIELD, or SUBSEQ operand object FIELD, or DDATA operand object FIELD, where the named FIELD is the name of an XDFLD. Fields defined by FLD statements are the only permitted operands.

System Action: None.

Programmer Response: Correct the XDFLD statement, and rerun DBDGEN.

XDFLD126 THIS XDFLD STATEMENT —name— HAS A PACKED DECIMAL (TYPE=P) SEARCH FIELD, BUT THE NULLVAL= OPERAND CONTAINS AN UNACCEPTABLE PACKED DECIMAL VALUE

Explanation: This is a warning message. The XDFLD statement named in the message has a SRCH operand object FIELD with TYPE=P, but the XDFLD NULLVAL operand does not contain a valid packed decimal value.

System Action: None.

Programmer Response: None.

XDFLD300 XDFLD STMT IS INVALID FOR {MSDB|DEDB} DBDS.

Explanation: The XDFLD statement was inappropriately specified for a DBDGEN with ACCESS=MSDB or ACCESS=DEDB specified on the DBD statement.

System Action: The system ignores all operands specified on the XDFLD statement and continues to process the remaining statements.

Programmer Response: Remove the XDFLD statement from the DBDGEN input stream, and rerun the DBDGEN.

Chapter 16. System Definition (G*nnn*) Messages

This section lists all the warning messages and error messages associated with system definition. Error messages indicate the Stage 2 job stream will not be produced because of the error condition. The messages are presented in numerical order. Where additional explanations are required, see *IMS Version 9: Installation Volume 2: System Definition and Tailoring*.

G000 IMSCTRL MUST BE 1ST STMT, IMSGEN MUST BE LAST.

Explanation: The sequence of input to IMS system definition requires the IMSCTRL statement to be the first statement and the IMSGEN statement to be the last. This message is issued by other Stage 1 macros also.

G001 MORE THAN ONE IMSCTRL STMT SPECIFIED.

Explanation: Only one IMSCTRL statement can be specified for an IMS system definition.

G002 FOLLOWING OPERAND(S) OMITTED OR INVALID:

Explanation: The list can include one or more of the following: DBRC, ETOFEAT, IRLMNM, IMSID, MAXCLAS, MAXIO, MAXREGN, MSVID, or SYSTEM.

By operand, one of the listed errors was detected.

DBRC

- More than one parameter was specified.
- The parameter was not specified as 'YES' or 'NO'.

ETOFEAT

- More than three subparameters were specified.
- The first parameter was not YES, NO, or null.
- The second parameter was not ALL or ONLY.
- A second parameter was specified when the first parameter was NO.
- The third sub-parameter was not ALL, NO, or ONLY.

IRLMNM

- More than one parameter was specified.
- The parameter was not 1 to 4 characters in length.
- The parameter does not consist of alphanumeric characters.

IMSID

- More than one parameter was specified.
- The parameter specified contained more than 4 characters.
- The parameter, as specified, was not alphanumeric.

MAXCLAS

- More than one parameter was specified.
- The parameter was not specified as a decimal value from 1 through 255.

MAXIO

- More than two parameters were specified.
- The first parameter is no longer used. It is kept only for compatibility purposes.
- The second parameter was specified, but not as a decimal value from 7 through 255.

MAXREGN

- More than four parameters were specified.
- The first parameter was specified, but not as a decimal value from 1 through 999.
- The second value was specified, but not as a value from 1 KB through 99999 KB.
- The third parameter was specified, but not as an alphanumeric character.
- The fourth parameter was specified, but not as an alphanumeric character.

MSVID

- More than one parameter was specified.
- The parameter was specified as a decimal number from 1 through 255.
- The parameter was not specified for a MSVERIFY type of system definition.

SYSTEM

- More than four parameters were specified.
- The first parameter was specified, but not as a decimal value from 1 to 31.
- The first part of the second parameter was not specified as ALL, CTLBLKS, NUCLEUS, BATCH, ON-LINE, MSVERIFY or MODBLKS.
- The second part of the second parameter was not specified as DB/DC, DBCTL, DCCTL, or null.
- The fourth parameter can be specified only as LGEN or null.

G003 RELEASE AND MOD LEVEL NOT SPECIFIED OR INVALID; DEFAULT xxx ASSUMED.

Explanation: This is a warning message. The specified third subparameter of the system keyword is

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not valid for the system specified or defaulted. The field xxx is the default release or modification level for the system specified. If VS/1 or VS/1V was specified as the first subparameter, the default is Release 7 Mod 0. If VS/2 was specified, the default is Release 3 Mod 8.

Problem Determination: See *IMS Version 9: Installation Volume 2: System Definition and Tailoring* for the valid keyword parameter for IMSCTRL.

G004 HOST SYSTEM MUST BE MVS FOR IRLM

Explanation: The IRLM feature can be included only if the host system, specified on the IMSCTRL macro, is specified as VS/2.

G005 DBRCNM OPERAND IS INVALID. DEFAULT ASSUMED.

Explanation: This is a warning message. One of the following occurred:

1. More than one operand was specified.
2. The operand exceeded 8 alphanumeric characters.
3. The operand did not begin with an alphabetic character.

System Action: The parameter is ignored and the default name is used.

G006 IRLM OPERAND IS INVALID. NULL ASSUMED.

Explanation: This is a warning message. One of the following occurred:

1. More than one operand was specified.
2. The only operands allowed are 'YES' and 'NO'.
3. The IRLM keyword is specified without the IRLMNM keyword also being specified.

System Action: The parameter is ignored and the default is used.

G007 WARNING: PRDR PARM INCORRECT.

Explanation: The PRDR parameter must consist of 1 through 8 alphanumeric or national characters; the first character must be alphabetic or national.

System Action: Stage 1 will not complete successfully.

Severity: 4

G008 LGEN ASSEMBLE EXECUTION NOT FROM THE PREPROCESSOR.

Explanation: One of the following occurred:

- A LGEN/MODBLKS or LGEN/MSVERIFY system definition assembly was attempted without using the preprocessor. The preprocessor must be invoked to build the assembly input and to call the assembler.
- High Level Assembler listing control instructions (such as PRINT OFF) are imbedded in the stage 1 source.

System Action: The assembly fails.

Programmer Response: Change the job step JCL to execute the preprocessor rather than the assembler or modify the stage 1 source by removing the assembler listing control instructions. Rerun the stage 1.

Severity: 4

G009 SCP LEVEL MUST BE AT LEAST SP 2.1.3 - HSB KEYWORD IGNORED.

Explanation: The level of MVS/XA specified cannot support XRF processing.

G010 NAMECHK= SPECIFICATION INVALID

Explanation: The name check parameter is invalid for one of the following reasons:

- The first positional parameter was incorrectly specified and should have been either YES or NO, where YES is the default.
- The second positional parameter was incorrectly specified and should have been either S1 or S2, where S1 is the default.
- The first positional parameter and the second parameter formed an invalid combination.
- NAMECHK was specified along with LGEN on the IMSCTRL SYSTEM keyword. NAMECHK is ignored. The preprocessor does duplicate name checking and the Sort/Split utility does resource sorting.

The following combinations are allowed:

```
NAMECHK=YES
NAMECHK=(,S1)
NAMECHK=(YES,S1)
NAMECHK=NO
NAMECHK=(NO,S1)
NAMECHK=(NO,S2)
```

System Action: The default is used for the invalid parameter.

Programmer Response: Change the NAMECHK= keyword specification.

Severity: 2

G011 WARNING: THE DBRC|MAXIO KEYWORD IS NO LONGER USED AND IS IGNORED.

Explanation: The DBRC|MAXIO keyword is for compatibility only. If specified, it is ignored. The DBRC value is specified in the DFSIDEF0 module that is built by IVP or can be assembled and bound from the sample provided in ADFSSMPL.

System Action: No action required.

Severity: 2

G012 HSB KEYWORD INVALID FOR BATCH SYSTEM - IGNORED

Explanation: XRF capability cannot be requested when defining a batch system.

G013 NO XRF CAPABILITY DUE TO PREVIOUS ERROR(S)

Explanation: The HSB keyword on the IMSCTRL macro was ignored because of previous errors. Refer to message G009 or G012, issued before this message, to determine why the keyword was ignored.

G014 HSB KEYWORD PARAMETER INVALID - DEFAULT 'NO' ASSUMED

Explanation: The only acceptable values for the HSB keyword on the IMSCTRL keyword are YES and NO. Neither was specified; NO is assumed.

G015 MORE THAN ONE IMSCTF STMT SPECIFIED.

Explanation: Only one IMSCTF statement can be specified for an IMS system definition.

G016 FOLLOWING OPERAND SPECIFICATIONS ARE INVALID: list

Explanation: The list can include one or more of the following: APNDG, CORE, CPLOG, DISKLOG DYLOG, LOG, RDS, or SVCNO. (This message might be issued by the IMSGEN macro also.)

By operand, one of the listed errors was detected.

APNDG

- Too many parameters were specified.
- Specified or defaulted parameters were not 2 characters each.
- Specified parameters were not in the range of WA through Z9.
- Specified parameters were not unique.
- CTC appendage was specified for non-z/OS system.

CORE

- More than four parameters were specified.
- One or more of the parameters specified was not a decimal value.
- One or more of the first three parameters was not in the range of 1 through 16000.
- The fourth parameter was not within the range of 0 through 252.
- Value 1 plus value 3 exceeded value 2.

CPLOG

- More than one parameter was specified.
- The parameter specified was not a decimal number within the range of 500 through 16777215.

DISKLOG

- More than one parameter was specified.
- The specified parameter was not YES or NO.

DYLOG

- More than three parameters were specified.
- The first parameter was not specified as 3350, 3340, 3330, 2314, or 2305.
- The second parameter was not a decimal number in the range of 516 through the track size of the device specified (or defaulted) in the first parameter.
- The third parameter was not in the range of 2 through 32767.

LOG

- More than two parameters were specified.
- A parameter other than SNGL, DUAL, or MONITOR was specified.
- An invalid combination of parameters was specified. For example, LOG=(SNGL,DUAL).

RDS

- More than three parameters were specified.
- The first parameter was not specified as 3350, 3340, 3330, 2314, or 2305.
- The second parameter was not a decimal number in the range of 1024 through the track size of the device specified (or defaulted) in the first parameter.
- The third parameter was not in the range of 2 through 32767.

SVCNO

- Too many parameters were specified.
- The second operand was not a decimal number between 128 through 255, or the third parameter was not a decimal number between 200 through 255.
- Any two specified or defaulted parameters are the same.

G017 WARNING: TYPE 1 SCVNO IGNORED

Explanation: This is a warning message. The user has specified a type 1 SVC number in the SVCNO keyword of the IMSCTF macro. The type 1 SVCs are no longer used and are therefore ignored.

G018 WARNING: OSAM CHANNEL END APPENDAGE IGNORED

Explanation: This is a warning message. The user has specified an OSAM channel end appendage suffix in the APNDG keyword of the IMSCTF macro. The OSAM channel end appendage is no longer used. This specification is therefore ignored.

G019 MACLIB OPERAND IS OBSOLETE.

Explanation: System definition no longer creates a copy job step for the macros. SMP/E places the macros into the databases with the low order names of ADFSMAC and SDFSMAC.

System Action: System definition continues.

Programmer Response: No action is required. Remove the MACLIB operand from the IMSGEN macro to eliminate this message the next time system definition is run.

Severity: 2

G032 DASD OPERAND IS INVALID.

Explanation: The specification of DASD is no longer supported. CORE is assumed.

System Action: System definition continues.

System Programmer Response: Remove the specification prior to the next system definition that is performing.

Severity: 2

G034 SPAREA MACRO NO LONGER REQUIRED. ALL PARAMETERS IGNORED.

Explanation: The SPAREA macro is no longer required. All parameters are ignored.

System Action: The system definition continues normally. The SPAREA macro is ignored.

System Programmer Response: Remove the SPAREA macro before performing the next system definition.

Severity: 2

G035 FIXED OPERAND IS INVALID.

Explanation: The FIXED operand is no longer supported.

System Action: System definition continues.

System Programmer Response: Remove the FIXED operand before performing the next system definition.

Severity: 2

G040 MORE THAN ONE BUFPOOLS STMT SPECIFIED.

Explanation: Only one BUFPOOLS macro-instruction statement is allowed within an IMS system definition.

G041 THE FOLLOWING OPERANDS ARE INVALID: list

Explanation: List can include one or more of the following: PSB, PSBW, DMB, DBASE, COMM, GENERAL, FORMAT, FRE, SASPSB

- For GENERAL operand specifications, either more than one parameter was specified in the operand, or the parameter was not specified as a decimal number in the range of 5000 through 999000.
- For PSB, PSBW, DMB, DBASE, AND COMM, operand specifications, either more than one parameter was specified in the operand, or the parameter was not specified as a decimal number less than or equal to 999000.
- For FORMAT operand specifications, either more than 2 parameters were specified in the operand, or the first parameter was not specified as a decimal number in the range of 2000 through 999000, or the second parameter was not specified as a decimal number in the range 0 through 998999, or the second parameter is greater than or equal to the first parameter.
- For FRE operand specifications, either more than one parameter was specified in the operand, or the parameter was not specified as a decimal number in the range of 10 through 65535.
- For SASPSB operand specifications only one operand was specified. Two are required.
- For SASPSB operand specifications one or both of the SASPSB operands was not a numeric value between 0 and 9999000.

G042 CSA and/or DLI PSB Pool Size is 0.

Explanation: This message is issued by IMS system definition macro BUFPOOLS as a result of processing the SASPSB parameter. In a DL/I subordinate address space system, if the CSA PSB pool size is zero, no scheduling can occur. If the DL/I PSB pool size is 0, no program which references a full-function database can be scheduled. CSAPSB= and DLIPSB= on the control region JCL can be used to override the SASPSB specifications.

G043 CSA PSB Pool Size GT or EQ to DL/I PSB Pool Size

Explanation: This message is issued by IMS system definition macro BUFPOOLS as a result of processing the SASPSB parameter. In a DL/I subordinate address space system, the size of the DL/I PSB pool should normally be much larger than the size of the CSA PSB

pool. CSAPSB= and DLIPSB= on the control region JCL can be used to override the SASPSB specifications.

G050 MORE THAN ONE MSGQUEUE STMT SPECIFIED.

Explanation: Only one MSGQUEUE statement can be specified for an IMS system definition.

G051 DSETS OPERAND IS OMITTED OR INVALID.

Explanation: One of the following occurred:

- The DSETS operand was not specified.
- The specified operand contained more than two than three parameters.
- An unsupported device was specified in one or more of the parameters.

G052 FOLLOWING OPERAND SPECIFICATIONS ARE INVALID: list

Explanation: The list can include one or more of the following: BUFFERS, RECLNG, or SHUTDWN.

By operand, one of the listed errors was detected.

BUFFERS

- More than two parameters were specified.
- The first parameter was not a decimal number from 3 through 9999.
- The second parameter was not a decimal number greater than or equal to the second parameter specified (or defaulted) in the RECLNG= keyword through 32 764, inclusive.

RECLNG

- More than two parameters were specified.
- The first parameter was not a decimal value from 112 through 32 764, inclusive.
- The second parameter was not a decimal value from 672 through 32 764.
- The first parameter was greater than the second parameter.

SHUTDWN

- More than one parameter was specified.
- The parameter specified was not a decimal number less than 32768.

G053 BUFFER SIZE EXCEEDS TRACK LENGTH; TRACK=length.

Explanation: The specified or default value of the second parameter of the BUFFERS keyword operand was less than the track capacity of the device that contained the smallest track length specified in the DSETS keyword operand. The buffer size cannot exceed 32K bytes, or the track length, whichever is smaller.

G054 ERROR IN MRQPSBN OPERAND. DEFAULT ASSUMED.

Explanation: One or more of the following occurred:

- More than one operand was specified for the MRQPSBN keyword on the MSGQUEUE macro statement.
- The specified operand was not alphanumeric.
- The specified operand exceeded 8 characters.

System Action: This warning message is issued, and the default name MRQPSB is assigned.

G055 RECLNG PARAMETER 1 OR 2 IS NOT EVENLY DIVISIBLE BY THE QBLKS LRECL VALUE OF 56.

Explanation: The RECLNG parameter specifies a value that is not evenly divisible by the IMS.QBLKS data set logical record length (LRECL). This results in unused space on the OLDS data set.

System Action: If the BUFFERS parameter size3 value was not specified, the size3 calculation uses the values in RECLNG parameters size1 and size2. If BUFFERS size3 was specified, RECLNG size1 and size2 are not used for calculating size3. Stage 1 will complete normally.

Programmer Response: No action is required. If size3 was not specified and you want to reduce the amount of unused space on the OLDS data set, respecify RECLNG size1 and size2 so they are an even multiple of the IMS.QBLKS data set LRECL value of 56.

Severity: 0

G056 THE MAXIMUM OF 999 LTERMS WAS EXCEEDED FOR MASTER, SECONDARY MASTER, OR XRF LU6 TERMINAL STATEMENTS.

Explanation: More than 999 NAME statements (LTERMS) were defined for the master, secondary master, or XRF LU6 terminal.

System Action: Stage 1 does not complete successfully.

Programmer Response: Correct the stage 1 input and rerun the stage 1.

Severity: 4

G060 POOL STMT MUST OCCUR WITHIN A SWITCHED LINEGRP.

Explanation: The preceding LINEGRP statement does not define a SWITCHED line group.

G061 LINE/POOL SPECIFICATION LIMIT EXCEEDED.

Explanation: The number of LINE statements plus the number of POOL statements exceeded 999.

G070 SUBPOOL STMT MUST FOLLOW POOL/VTAMPOOL STMT; SUBPOOL SPECIFICATION IS IGNORED.

Explanation: One of the following occurred:

- Either a POOL or a VTAMPOOL statement did not precede this SUBPOOL statement. The POOL statement is required to define one or more switched BTAM LTERM SUBPOOLs, and a VTAMPOOL statement to define one or more VTAM LTERM SUBPOOLs for parallel LUTYPE6 sessions.
- A LINE statement occurred preceding this SUBPOOL statement and following any preceding POOL statement.
- For a VTAM LTERM SUBPOOL for LUTYPE6 parallel sessions, a TYPE, TERMINAL, or NAME statement occurred preceding this SUBPOOL statement and following a preceding VTAMPOOL statement.

G072 NAME OPERAND IS OMITTED OR INVALID

Explanation: One of the following occurred:

- The operand was omitted for a VTAM LTERM SUBPOOL for LUTYPE6 parallel sessions.
- The parameter exceeded 8 alphanumeric characters.
- The parameter did not begin with an alphabetic character.
- More than one parameter was specified.
- The operand was specified for a BTAM switched LTERM SUBPOOL.

G073 MSGDEL OPERAND IS INVALID

Explanation: One of the following occurred:

- The parameter was not specified as SYSINFO, or NONIOPCB.
- More than one parameter was specified.

G074 SPECIFIED SUBPOOL NAME IS A DUPLICATE

Explanation: The SUBPOOL NAME operand has been previously specified.

G080 USER ROUTINE TABLE FULL.

Explanation: This is a warning message. More than 200 user routines were defined to be included in the generated system.

System Action: All user routines which exceed the limit are not included.

G085 COMMUNICATION TERMINAL TABLE (CTT) EXCEEDED.

Explanation: More than 255 unique communication devices were defined.

G090 MORE THAN ONE COMM STATEMENT SPECIFIED.

Explanation: Only one COMM macro-instruction statement is allowed within an IMS system definition.

APPLID

- The parameter did not begin with an alphanumeric character.
- The parameter contained more than 8 alphanumeric characters.
- More than one parameter was specified.

CIPHER

- More than two parameters were specified.
- A parameter was used which did not begin with an alphabetic character or was more than 8 characters long.
- OPTIONS=NOCIPH was coded but a conflicting CIPHER operand was used.

MFSEXIT

- More than two parameters were specified.
- A parameter was specified and it was not a decimal number.
- The first parameter was not equal to or greater than 0 and less than the default or specified value of the second parameter.
- The second parameter was not equal to or greater than the default or specified value of the first parameter.

OPTIONS

- More than ten parameters were specified.
- No valid parameter specifications were made.
- Conflicting or duplicate parameter specifications were made.

PASSWD

- The parameter did not begin with an alphanumeric character.

- The parameter contained more than 8 alphanumeric characters.
- More than one parameter was specified.

RECANY

- More than two parameters were specified.
- The first parameter was specified, but not as a decimal number greater than 0 and less than or equal to 500.
- The second parameter was specified, but not as a decimal number greater than or equal to 50 and less than or equal to 4095.

SECCNT

- More than one parameter was specified.
- The parameter was specified, but not as a decimal number greater than or equal to 0 and less than or equal to 3.

G091 COMM STATEMENT MUST BE DEFINED BEFORE ANY VTAM TERMINAL OR VTAMPOOL DEFINITIONS.

Explanation: The COMM macro must be placed before any VTAM TERMINAL or VTAMPOOL definitions in the Stage 1 input sequence.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun Stage 1.

G092 THE OPTIONS PARAMETERS MSTEXIT AND NOMSTEX ARE NO LONGER USED AND WILL BE IGNORED.

Explanation: The MSTEXIT and NOMSTEX parameters can no longer be coded on the OPTIONS keyword on the COMM macro.

System Action: The parameters are ignored.

Programmer Response: No action is required, but advise that you remove the parameters from the OPTIONS keyword of the COMM macro.

Severity: 2

G098 THE FOLLOWING OPERANDS ARE INVALID: list

Explanation: The following error was detected:

AOEXIT

- More than one parameter was specified.
- The parameter was not specified as YES or NO.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G101 POSITIONAL PARAMETER(S) INVALID.

Explanation: The positional parameters of the DATABASE statement are valid only when specified as INDEX or RESIDENT, or both.

G102 DBD OPERAND IS OMITTED OR INVALID.

Explanation: One of the following occurred:

- The DBD keyword operand was not specified.
- A DBD keyword operand parameter did not begin with an alphabetic character.
- A DBD keyword operand parameter contained more than 8 alphanumeric characters.
- The value begins with the string 'DFS' or 'DBCDM', or it contains a reserved word.

System Action: Stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G103 DBD OPERAND CONTAINS DUPLICATE SPECIFICATION. SPECIFIED DBD NAME WAS name

Explanation: The DBD name was previously specified on a DATABASE statement.

G104 ACCESS OPERAND SPECIFIED INCORRECTLY

Explanation: One of the following occurred:

- More than one parameter was specified.
- The specified parameter was not one of the following: "RO", "RD", "UP", "EX"

G105 DATABASE STATEMENT TOTAL SPECIFICATION EXCEEDED.

Explanation: The total number of DATABASE specifications was exceeded. The total DATABASE definition cannot exceed 32,700.

System Action: The Stage 1 assembly fails.

Programmer Response: Limit the number of DATABASE definitions to 32,700.

Severity: 4

G110 MORE THAN 1 SECURITY STATEMENT SPECIFIED

Explanation: A SECURITY macro statement has already been processed. It is invalid to have more than one.

G111 RACF NOT SUPPORTED FOR THE OPERATING SYSTEM SPECIFIED ON IMSCTRL.

Explanation: The RACF specification (TYPE=RACFTERM or RACFAGN) is valid only for VS/2 Release 3.7 or later (z/OS).

G112 THE FOLLOWING OPERANDS ARE INVALID: list

Explanation: The list can include one or more of the following: PASSWD, RCLASS, SECCNT, SECLVL, TERMNL, TRANCMD, or TYPE.

By operand, one of the listed errors was detected.

RECLASS

- More than one parameter was specified.
- The parameter was not specified as 1 to 7 alphanumeric characters.

SECCNT

- More than one parameter was specified.
- The parameter was not specified as 0, 1, 2, or 3.

SECLVL

- An invalid parameter was specified.
- Two mutually exclusive parameters were specified.
- More than two parameters were specified.
- TRANAUTH was specified with NOSIGN.
- FORCTRAN was specified with NOSIGN or SIGNON.

TRANCMD, PASSWD, or TERMNL

- More than one parameter was specified.
- The parameter was not specified as FORCE, YES, or NO.

TYPE

- An invalid parameter was specified.
- Two mutually exclusive parameters were specified.
- More than seven parameters were specified.
- TRANEXIT was specified with NORACTRM and NOSIGNEX.
- More than one of the following parameters was specified: RAS, NORAS, RASRACF, and RASEXIT.

G113 TYPE SECLVL PARAMETER COMBINATION IS INVALID

Explanation: One of the following has occurred:

- TYPE=(NORACTRM,NOTRANEX, NOSIGNEX) was specified or defaulted and the SECLVL operand specified either FORCTRAN, TRANAUTH, FORCSIGN, or SIGNON.
- TYPE=(NORACTRM,NOTRANEX) was specified or defaulted, and the SECLVL operand specified either FORCTRAN or TRANAUTH.

G114 TYPE=RACFTERM NOT SPECIFIED; RCLASS IGNORED.

Explanation: This is a warning message. It is not valid to specify a RACF subsystem ID unless TYPE=RACFTERM or RACFAGN is also specified; therefore, the specification is ignored.

G140 NUMBER OF NAMED MACROS DEFINED EXCEEDS MAXIMUM

Explanation: The number of NAME macros or statements specified in stage 1 exceeds the maximum, which is an internal limit. The actual maximum in any system definition is dependent upon the number of remote LTERMS that are defined.

System Action: The NOGO switch is set and the stage 1 does not complete normally.

Programmer Response: Correct the specification and rerun stage 1.

G141 INTERNAL ERROR DETECTED IN PCHCOMU MACRO

Explanation: An internal error has been detected in the execution of the PCHCOMU macro during a stage 1 assembly.

System Action: The NOGO switch is set and the stage 1 does not complete normally.

Programmer Response: Attempt to run the stage 1 assembly. If the problem continues, contact the IBM support center for assistance.

G151 THE MAXIMUM NUMBER OF STEPS (255) FOR THIS JOB HAS BEEN EXCEEDED

Explanation: With the ONEJOB= subparameter on the IMSGEN macro set to YES, a maximum of 255 steps are allowed. This message is issued from PCHJOB macro.

System Action: The Stage 1 assembly will not complete successfully.

System Programmer Response: Reduce the number

of steps per job by specifying ONEJOB=NO and rerun the Stage 1 assembly.

Severity: 4

G170 ETOFEAT=(,,ALL|ONLY) IS INVALID IF NO DC IS DEFINED.

Explanation: The ETOFEAT keyword was defined with sub-parameter three specified as ALL or ONLY. But the stage 1 input deck did not contain any data communication system definition macro statements. Therefore, the normal stage 1 output cannot be generated.

System Action: The NOGO switch is set, and the stage 1 will not complete normally.

System Programmer Response: Redefine the keyword, or add data communication system definition macro statements to the stage 1 input deck. Run the stage 1 input job again.

Severity: 4

G201 POSITIONAL PARAMETER(S) INVALID.

Explanation: One of the following has occurred:

- More than one positional parameter was specified.
- A positional parameter other than DOPT or RESIDENT was specified.
- DOPT and SCHTYP=PARALLEL, which are mutually exclusive, were specified.

G202 PGMTYPE OPERAND IS INVALID.

Explanation: One of the following occurred:

- More than three parameters were specified.
- TP and BATCH were both specified.
- TP, BATCH, or OVLY was specified twice.
- A parameter was not specified as TP, BATCH, or OVLY.
- The class number was not specified as a value from 1 to 255 inclusive
- The class number was greater than the specified or defaulted value of the MAXCLAS operand of the IMSCTRL statement.

G203 SCHDTYP OPERAND IS INVALID.

Explanation: One of the following occurred:

- More than one parameter was specified.
- The parameter was not specified as SERIAL or PARALLEL.

G205 PSB OPERAND IS OMITTED OR INVALID.

Explanation: One of the following occurred:

- The PSB keyword operand was not specified.
- More than one parameter was specified.
- The parameter did not begin with an alphabetic character, or it contained more than 8 alphanumeric characters.
- The value begins with the string 'DFS' or 'DBCDM', or it contains a reserved word.

System Action: Stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G206 PSB OPERAND IS A DUPLICATE.

Explanation: The specified PSB name was previously specified on an APPLCTN macro-instruction statement.

G207 SYSID OPERAND IS INVALID.

Explanation: One of the following occurred:

- The specified SYSID keyword operand did not contain two parameters.
- The specified parameter was not a decimal value from 1 through 2036.
- The same value was specified for both SYSID parameters.

System Action: Stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G208 FPATH OPERAND IS INVALID.

Explanation: The FPATH= keyword operand is not one of the following valid specifications: FPATH=YES, FPATH=NO, FPATH=, FPATH=0, FPATH=size.

System Action: Generation terminates.

System Programmer Response: Correct the FPATH= keyword specification on the APPLCTN or TRANSACT macro and rerun Stage 1 assembly.

Severity: 4

Problem Determination: 10

G209 OVLY IS INVALID WHEN FPATH=YES. PGMTYPE OPERAND OVLY PARAMETER IS IGNORED.

Explanation: This is a warning message. The OVLY parameter of the PGMTYPE= keyword operand is incompatible with FPATH=YES.

System Action: The APPLCTN macro ignores the OVLY specification after issuing the warning message.

Programmer Response: Remove the OVLY parameter specification.

G210 CLASS IS INVALID WHEN FPATH=YES

Explanation: This is a warning message. Fast Path does not use class specification for program scheduling.

Programmer Response: Remove the CLASS parameter on the PGMTYPE keyword operand.

G212 SYSID IS INVALID WHEN FPATH=YES

Explanation: The SYSID= keyword operand is incompatible with FPATH=YES.

Programmer Response: Remove the SYSID= or the FPATH= keyword specification.

G213 FPATH=YES IS INVALID WITH PGMTYPE=BATCH

Explanation: Non-message-driven Fast Path regions are not supported.

System Action: Stage 1 will not complete successfully.

Programmer Response: The non-message-driven program must be changed to run as either a message-driven program or a BMP.

G214 GPSB IS INVALID

Explanation: The GPSB= parameter has been incorrectly specified.

Programmer Response: Correct the GPSB= keyword specification and rerun the Stage 1 assembly.

G215 RESIDENT AND DOPT ARE INVALID WITH GPSB

Explanation: The GPSB= parameter has been specified with either the RESIDENT parameter or the DOPT parameter. The RESIDENT and DOPT parameters are mutually exclusive with the GPSB= parameter. The RESIDENT or DOPT parameter is ignored.

G216 LANG=*xxxxx* IS ONLY VALID WITH GPSB | DOPT

Explanation: The LANG= parameter was specified, but the GPSB=, or DOPT for Java, parameter was not specified.

System Action: The stage 1 will not complete

Programmer Response: Correct the specification of the LANG= and GPSB= or DOPT parameters.

Severity: 4

G217 LANG IS INVALID

Explanation: The LANG= parameter has been incorrectly specified. The value specified must be ASSEM, COBOL, JAVA, PL/I, or PASCAL.

Programmer Response: Correct the specification of the LANG= parameter and rerun the Stage 1 assembly.

G218 GPSB OPERAND IS INVALID

Explanation: One of the following occurred:

- The GPSB= parameter does not begin with an alphabetic character, or it contained more than eight alphanumeric characters.
- The value begins with the string 'DFS' or 'DBCDM', or it contains a reserved word.

System Action: Stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G219 PSB IS INVALID WITH GPSB

Explanation: Both the PSB= and GPSB= keywords were specified. These keywords are mutually exclusive.

System Action: Stage 1 will not complete successfully.

Programmer Response: Remove the PSB= or GPSB= keyword specification and rerun the Stage 1 assembly.

Severity: 4

G220 LANG=JAVA INVALID WHEN FPATH=YES

Explanation: FPATH=YES cannot be specified with LANG=JAVA.

System Action: Stage 1 will not complete successfully.

Programmer Response: Remove the FPATH=YES keyword specification or correct the LANG= keyword specification.

Severity: 4

G300 TRANSACT SPECIFICATION CANNOT PRECEDE APPLCTN.

Explanation: The TRANSACT statement must be used in conjunction with a preceding APPLCTN statement.

G302 POSITIONAL PARAMETER(S) INVALID.

Explanation: More than one positional parameter was specified, or the parameter specified was not WFI.

G303 PRIORITY VALUES FOR TRANSACTION CODES USED BY BATCH PROGRAMS MUST BE NULL; SPECIFIED PRIORITY VALUES RESET TO ZERO.

Explanation: This is a warning message.

G304 INQUIRY AND INQ OPERANDS ARE MUTUALLY EXCLUSIVE; ONLY ONE MAY BE SPECIFIED.

Explanation: The INQUIRY and INQ operands cannot both be specified on any one TRANSACT statement.

G305 CONVERSATIONAL AND WFI TRANSACTIONS MUST BE MODE=SNGL; MODE RESET TO INDICATE SNGL.

Explanation: This is a warning message.

G306 THE FOLLOWING OPERANDS ARE INVALID: list

Explanation: One of the following occurred:

- The value begins with the string 'DFS' or 'DBCDM', or it contains a reserved word.
- The list can include one or more of the following: EDIT, INQ/INQUIRY, MODE, MSGTYPE, PARLIM, PROCLIM, PRTY, SCHD, SEGNO, SEGSIZE, SPA, or SYSID.

  By operand, one of the listed errors was detected.

  EDIT
  - More than two parameters were specified.
  - The first parameter was specified but was not specified as UC or ULC.
  - The second parameter was specified but was not specified as a 1- to 8- character alphanumeric name that begins with an alphabetic character.

  INQ/INQUIRY
  - More than two parameters were specified.
  - A parameter specified was not specified YES, NO, RECOVER or NORECOV.
  - NORECOV and SPA were both specified.
  - Incompatible parameters were specified. For example, INQ=(YES,NO) or INQ=(NO,NORECOV).

  MODE
  - More than one parameter was specified.
  - A parameter other than SNGL or MULT was specified.

  MSGTYPE
  - More than three parameters were specified.
  - A parameter specified was not specified as MULTSEG, SNGLSEG, NONRESPONSE, RESPONSE, or not specified as a decimal number from 1 to 255, and less than the specified or default value of the IMSCTRL statement MAXCLAS keyword operand.
  - An invalid combination of parameters was specified.

  PARLIM
  - SCHDTYP=PARALLEL was not specified for the preceding APPLCTN macro instruction statement.
  - The parameter was specified but was not specified as a decimal number from 1 to 32767.

  PROCLIM
  - More than two parameters were specified.
  - One of the parameters was specified but was not specified as a decimal number from l to 65535.

  PRTY
  - More than three parameters were specified.
  - The first or the second parameter, or both, was specified but was not specified as a decimal number from 1 to 14.
  - The third parameter was specified but was not specified as a decimal number from 1 to 65535.

  SCHD
  - More than one parameter was specified.
  - The specified parameter was not a decimal number from 1 to 4.

  SEGNO or SEGSIZE, or both
  - More than one parameter was specified.
  - The specified parameter was not a decimal number from 1 to 65535.

  SPA
  - More than two subparameters were specified.

– The first subparameter was not a decimal number from 16 to 32767.
– The second subparameter was not the characters STRUNC or RTRUNC.

SYSID
– The operand did not contain two parameters.
– The specified parameters were not a decimal value from 1 to 2036.
– The same value was specified for both SYSID parameters.
– The parameter cannot be specified for a Fast Path exclusive transaction.

System Action: Stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G307 CODE OPERAND CONTAINS DUPLICATE ENTRY. SPECIFIED TRANSACTION CODE—code.

Explanation: A specified transaction code name was previously specified as a transaction code name.

G308 TRANSACTION CODE IS DEFINED AS AN LTERM. SPECIFIED TRANSACTION CODE—code.

Explanation: The specified transaction code name was also specified as a logical terminal name.

G309 CODE OPERAND IS OMITTED OR INVALID. SPECIFIED TRANSACTION CODE—code.

Explanation: One of the following occurred:

- The CODE operand was not specified.
- The parameter contained a null subparameter.
- The parameter was not specified as a 1- to 8-character alphanumeric name.

G310 TRANSACT MACRO INVALID FOR FAST PATH NONMESSAGE DRIVEN APPL PROGRAM.

Explanation: Fast Path non-message-driven application programs are not allowed to issue file calls to retrieve or insert terminal messages. TRANSACT macros following a Fast Path non-message-driven APPLCTN macro are therefore invalid.

Programmer Response: Remove all TRANSACT macros following the APPLCTN macros with FPATH=YES and PGMTYPE=BATCH specified.

G311 SPA OPERAND(S) INVALID FOR FAST PATH APPLICATION PROGRAMS.

Explanation: Fast Path does not support conversational transactions.

Programmer Response: Remove the SPA= keyword operand specification on all Fast Path transactions.

G313 IMS BMP APPLICATION INCOMPATIBLE WITH FAST PATH POTENTIAL TRANSACTION.

Explanation: Fast Path does not support Fast Path potential transactions on BMP application programs.

Programmer Response: Remove the FPATH= keyword operand from the TRANSACT macro or convert the BMP application to a MPP.

G314 FAST PATH TRANSACTION MUST BE MODE=SNGL. MODE RESET TO SNGL.

Explanation: This is a warning message. Fast Path only supports transactions that are specified as MODE=SNGL.

Programmer Response: Specify MODE=SNGL or remove the MODE keyword operand.

G315 FAST PATH TX MUST BE MSGTYPE=(SNGLSEG,RESPONSE). MSGTYPE RESET TO (SNGLSEG,RESPONSE).

Explanation: Fast Path only supports transactions that are specified as MSGTYPE=(SNGLSEG,RESPONSE). This is a warning message only.

Programmer Response: Change the MSGTYPE keyword operand to specify MSGTYPE=(SNGLSEG,RESPONSE) or eliminate the specification.

G317 MAXRGN OPERAND INVALID, DEFAULT ASSUMED.

Explanation: One of the following occurred:

- More than one value was specified for the MAXRGN= keyword on the TRANSACT macro.
- If the value is not zero, then PARLIM= is not specified.
- The MAXRGN= keyword is not a value from 0 through 255.

System Action: The default value of zero is used.

Programmer Response: No action is required.

Severity: 2

G318 SERIAL OPERAND INVALID, DEFAULT ASSUMED.

Explanation: One of the following occurred:

- More than one value was specified for the SERIAL= keyword on the TRANSACT macro.
- The PARLIM= keyword has a value specified.
- The SERIAL= keyword is not set to YES, NO, or null.

System Action: The default value of NO is used.

Programmer Response: No action is required.

Severity: 2

G399 SESSION BACKUP PARAMETER INVALID

Explanation: The BACKUP keyword is invalid for one of the following reasons:

- The first value in the BACKUP keyword was less than 1 or greater than 7.
- The second value in the BACKUP keyword was not YES or NO.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G400 LINEGRP SPECIFICATION LIMIT EXCEEDED.

Explanation: The number of LINEGRP statements specified exceeded 255 minus the number of ddnames on each LINEGRP statement specifying unit type SPOOL, minus the number of SPOOL LINEGRP statements.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G401 DDNAME OPERAND IS OMITTED OR INVALID.

Explanation: One of the following occurred:

- The operand was not specified.
- The operand contained more than one ddname for other than a SPOOL line group.
- A ddname specified did not begin with a letter, and contain from 1 to 8 characters.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G402 ENTERED DDNAME IS A DUPLICATE—ddname.

Explanation: The name specified in the ddname operand of this LINEGRP statement is a duplicate of one specified on a previous LINEGRP statement.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G403 ENTERED DDNAME IS RESERVED—ddname.

Explanation: A ddname reserved for use by IMS was specified. See *IMS Version 9: Installation Volume 2: System Definition and Tailoring*.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G404 UNITYPE OPERAND IS OMITTED OR INVALID.

Explanation: One of the following has occurred:

- The first operand does not specify an IMS supported terminal device type.
- The second operand is specified with a device for which it is not valid, or is an invalid value. (LOCAL, NOSTACTL, and CONTENTION are the only valid values.)
- The third operand is specified with a device other than a S/7, or is an invalid value. (S/S and BSC are the only valid values.)
- More than three operands were specified.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G405 FEAT AND UNITYPE OPERANDS NOT COMPATIBLE.

Explanation: FEAT=SWITCHED is valid for 2740, 2741, and 3275 only. FEAT=NONSWITCHED is invalid for 3275. FEAT=(,AUTOPOLL) is invalid for 3270 local,

System/7 using contention, 2741, and 2740 without the station control feature.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G406 FOLLOWING OPERANDS ARE INVALID: list

Explanation: The list can include one or more of the following: CODE, EDIT, FEAT, or MODE.

By operand, one of the listed errors was detected.

CODE

- More than one parameter was specified on a terminal other than a 2741, switched.
- More than two parameters were specified on a 2741 terminal, switched.
- The code keyword was specified for a terminal other than 2741, 2780, 3270 remote, or 3275.
- An invalid transmission code was specified for the terminal in the UNITYPE= keyword. For example, CODE=BCD with a 2780 was specified.
- The first or second parameter is not a transmission code supported by IMS.

EDIT

- More than two parameters were specified.
- A parameter was specified, and it does not begin with an alphabetic character.
- A parameter was specified, and it is longer than 8 characters.

FEAT

- More than two parameters were specified.
- The first parameter was not specified as SWITCHED or NONSWITCHED.
- The second parameter was not specified as POLL or AUTOPOLL.
- The first parameter was specified as SWITCHED and the second parameter was not omitted.
- The first parameter was omitted, but the second parameter was specified.

MODE

- More than two parameters were specified.
- A parameter was not specified as A or B.
- This keyword was specified for a terminal type other than 2780.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G408 BTAM TERMINAL SPECIFICATIONS MUST PRECEDE VTAM TERMINAL SPECIFICATIONS.

Explanation: This is a warning message. IMS system definition will construct the communication control blocks as though all VTAM terminals were defined last.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 2

G409 BTAM TERMINAL SPECIFICATIONS MUST PRECEDE MULT SYSTEM SPECIFICATIONS.

Explanation: BTAM terminal definition statements must precede the multiple system definition statements.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G410 MORE THAN 20 DDNAMES SPECIFIED FOR ONE LINEGRP.

Explanation: The number of ddnames for one LINEGRP macro exceeded the maximum of 20 ddnames.

System Action: Stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G430 LINEGRP AND MSPLINK STATEMENT TOTAL SPECIFICATION EXCEEDED.

Explanation: The LINEGRP and the MSPLINK statement total specification was exceeded. The total number of LINEGRP and MSPLINK statements cannot exceed 676.

System Action: Stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G431 PLINK NAME SPECIFICATION OMITTED OR INVALID.

Explanation: One of the following occurred:

- The required name on the MSPLINK statement was not specified.
- The name specified was not a 1- to 8- character name beginning with an alphanumeric character.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G432 PLINK NAME SPECIFIED BY PREVIOUS MSPLINK MACRO.

Explanation: The physical link name specified is a duplicate of one specified on a previous MSPLINK statement.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G433 DDNAME SPECIFICATION IS INVALID FOR TYPE=MTM|VTAM.

Explanation: A ddname must not be specified when the multiple systems link type is main storage-to-main storage or MSC/VTAM.

System Action: Stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G434 DDNAME SPECIFICATION IS OMITTED OR INVALID.

Explanation: One of the following occurred:

- The ddname required for TYPE=CTC was not specified.
- The ddname specified was not a 1- to 8-character name beginning with an alphanumeric character.
- More than one ddname was specified.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G435 ENTERED DDNAME IS RESERVED—ddname...

Explanation: A ddname reserved for use by IMS was specified. Refer to *IMS Version 9: Installation Volume 2: System Definition and Tailoring*.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G436 ENTERED DDNAME IS DUPLICATE—ddname...

Explanation: The name specified in the ddname operand is a duplicate of one specified on a previous LINEGRP or MSPLINK statement.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G437 ADDR SPECIFICATION IS INVALID FOR TYPE=MTM|VTAM.

Explanation: The ADDR operand is invalid when the multiple systems link type is main storage-to-main storage or MSC/VTAM.

System Action: Stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G438 ADDR SPECIFICATION IS OMITTED OR INVALID.

Explanation: One of the following occurred:

- The ADDR operand required for TYPE=CTC was not specified.
- The ADDR specified was not a single operand specified as 3 or 4 hexadecimal digits.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G439 SESSION BACKUP PARAMETER INVALID

Explanation: The BACKUP keyword on the MSPLINK macro did not have the value NO or a value from 1 through 7.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G440 TYPE SPECIFICATION OMITTED OR INVALID.

Explanation: One of the following occurred:

- The required operand was not specified.
- The TYPE= keyword was not one of these values: VTAM, MTM, or CTC.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G441 BUFSIZE SPECIFICATION OMITTED OR INVALID.

Explanation: One of the following occurred:

- The required operand was not specified.
- The BUFSIZE operand was not a single operand number, in the range 64 through 32689.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G445 NAME OPERAND VALID ONLY FOR TYPE=VTAM

Explanation: The NAME operand is not valid unless the multiple systems link type is MSC/VTAM.

System Action: Stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G446 NAME OPERAND IS OMITTED OR INVALID

Explanation: One of the following occurred:

- The NAME required when multiple systems link type is MSC/VTAM was not specified.
- The NAME specified was not a 1- to 8-character name beginning with an alphabetic character.
- The value begins with the string 'DFS' or 'DBCDM', or it contains a reserved word.

System Action: Stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G447 ENTERED NAME IS DUPLICATE NAME—name

Explanation: The nodename specified in the NAME operand (name) is a duplicate of a previously specified nodename.

System Action: Stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G448 SESSION OPERAND VALID ONLY FOR TYPE=VTAM

Explanation: The SESSION operand was specified, but it is invalid if the multiple systems link type is not MSC/VTAM.

System Action: Stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G449 SESSION OPERAND INVALID

Explanation: The SESSION operand specified was not numeric, or was not between 1 and 676.

System Action: Stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G452 UNITYPE SPECIFICATION IS INVALID.

Explanation: One of the following occurred:

- The UNITYPE operand was not specified.
- More than two parameters were specified.
- The first parameter was specified but was not 3270, 3601, SLUTYPE1, SLUTYPE2, SLUTYPEP, or LUTYPE6.
- The second parameter was specified, but was not LOCAL.
- The second parameter was specified LOCAL, but the first parameter was not 3270.

Error messages, generated by additional macro instruction statements associated with this type of specification, might be invalid. Processing of these macro instructions might be incorrect.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G453 EDIT OPERAND IS INVALID.

Explanation: One of the following occurred:

- More than two parameters were specified.
- One or both of the parameters were specified, but not as a l- to 8-character, alphanumeric name, beginning with an alphabetic character.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G454 FOLLOWING DEFAULT TERMINAL SPECIFICATIONS ARE INVALID: list

Explanation: Refer to the TERMINAL macro error messages that are related to the listed operands.

To find the correct specification of the operands in error, see the TERMINAL macro description in *IMS Version 9: Installation Volume 2: System Definition and Tailoring*.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G455 FOLLOWING SPECIFICATIONS ARE IGNORED: list

Explanation: This is a warning message. The listed operands were ignored because the UNITYPE specified does not warrant the specification of the operands.

System Action: The stage 1 will complete successfully.

Programmer Response: No action is required.

Severity: 2

G456 WARNING: SIZE OPERAND FOR DISPLAY EXCEEDS 255 AND MAY BE INCONSISTENT WITH VTAM REQUIREMENTS.

Explanation: The line or column operands of the SIZE= keyword exceeds 255.

System Action: The stage 1 will complete successfully.

Programmer Response: No action is required.

Severity: 2

G457 FPACK/NFPACK OPERAND IGNORED

Explanation: One of the following occurred:

- FPACK/NFPACK was specified for a terminal type other than 3601 or SLUTYPEP.
- For a 3601 or SLUTYPEP terminal, FPACK/NFPACK parameters are ignored when the terminal is not eligible for Fast Path (FPBUF=0).

System Action: The stage 1 will complete successfully.

Programmer Response: No action is required.

Severity: 2

G458 SESSION BACKUP PARAMETER INVALID

Explanation: The BACKUP keyword is invalid for one of the following reasons:

- The first value in the BACKUP keyword was less than 1 or greater than 7.
- The second value in the BACKUP keyword was not YES or NO.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G460 ASR OPTION IS NOT VALID FOR THIS DEVICE TYPE

Explanation: This is a warning message and can be issued by the TYPE or the TERMINAL macro. ASR was specified on the OPTIONS parameter, but the ASR specification is valid for SNA VTAM devices only.

System Action: The ASR specification is ignored.

Programmer Response: No action is required.

Severity: 2

G470 TRSOSI/NOTRSOSI OPTIONS IGNORED

Explanation: TRSOSI/NOTRSOSI was specified for a terminal type other than 3270 VTAM or SLUTYPE2.

System Action: The TRSOSI/NOTRSOSI specification is ignored.

Programmer Response: No action is required.

Severity: 2

G500 LINE SPECIFICATION CANNOT OCCUR BEFORE LINEGRP.

Explanation: The input sequence of IMS system definition statements requires that the LINEGRP statement must precede the LINE statements. Each LINE statement must be used in conjunction with a preceding LINEGRP statement.

G501 LINE SPECIFICATION LIMIT EXCEEDED.

Explanation: The number of LINE statements plus the number of POOL statements cannot exceed 999.

G502 LINE SPECIFICATION EXCEEDED FOR LINE GROUP.

Explanation: The line specification was exceeded for the line group. Only one LINE can be specified for 2260 local, 3270 local, SPOOL, and SYSIN/SYSOUT lines.

G503 REFERENCED CONFIG STMT NOT PREVIOUSLY DEFINED.

Explanation: The CONFIG keyword operand parameter references the label of a CONFIG statement which was not defined preceding this LINE statement.

G504 REFERENCED IDLIST STMT NOT PREVIOUSLY DEFINED.

Explanation: The IDS keyword operand parameter references the label of an IDLIST statement which was not defined preceding this LINE statement.

G505 REFERENCED LINE HAS NO TERMINAL.

Explanation: The LINE statement, associated with the IDLIST statement referenced in the IDS keyword operand parameter, has no TERMINAL statement associated with it.

G506 ADDR OPERAND IS OMITTED OR INVALID.

Explanation: One of the following occurred:

- The operand was not specified, when required.
- The operand was specified for a 3270 local or a 2260 local line group.
- The specified value did not contain three hexadecimal digits through FFF.
- More than one parameter was specified.

G507 ADDR VALUE HAS BEEN PREVIOUSLY SPECIFIED.

Explanation: All line addresses specified in the system definition must be unique values.

G508 BUFSIZE OPERAND IS OMITTED OR INVALID.

Explanation: One of the following occurred:

- This keyword parameter was specified for other than a 3270 local, 7770-3, S/3, S/7, DISK, TAPE, or SPOOL line.
- This keyword parameter was *not* specified for a S/3, S/7, DISK, TAPE, or SPOOL line.
- More than two parameters were specified for a 7770, S/3, or S/7 line, or more than one parameter was specified for a line with other than these devices.
- For a 3270 local line, a value other than a decimal number from 300 through 32 000 was specified.
- For a 7770 line, the first parameter was not specified as a decimal number from l through 240, or the second parameter was not specified as a decimal number from l through 250.
- For a S/3 or S/7 line, the parameters were not specified as decimal numbers from 50 through 65 000.
- For a DISK, TAPE, or SPOOL line, the parameters were not specified as decimal numbers from l6 through 32 767.

G509 FOLLOWING OPERANDS ARE INVALID: list

Explanation: The list can include one or more of the following: CONFIG, FEAT, IDS, MODEL, RESP, or VERIFY.

By operand, one of the listed errors was detected.

CONFIG

- This keyword operand was specified for a line that is not a 3275 line.
- The parameter specified was longer than 8 characters.
- The CONFIG statement referenced was not previously defined.

FEAT

- This keyword operand was specified for a line which is not a 2770, 2980, or 7770 line.
- More than one parameter was specified for a 2770 or 2980 line, or more than two parameters were specified for a 7770 line.
- The first parameter was not specified as ABC or ABB for a 7770 line, or as BUFEXP or BUFEXP1 for a 2770 line, or as BUFEXP for a 2980 line.
- The second parameter was not specified as REPEAT or NOREPEAT.

IDS

- This keyword operand was specified for a line that is not a 3275 line.
- The parameter specified was longer than 8 characters.
- The IDLIST statement referenced was not previously defined.

MODEL

- This keyword operand was specified for a line other than a 2740 line.
- More than three parameters were specified.
- The first parameter was specified as a 1, but the following parameters were not omitted.
- The first parameter was specified as a 2 on a switched line.
- The first parameter was not a 1 or a 2.
- The second parameter was not 120, 248, or 440.
- The third parameter was not a decimal number less than or equal to 28, and a multiple of 4.

RESP

- More than one parameter was specified.
- The operand was not specified as LINE or TERM.
- The keyword was specified for a terminal type other than 2740 Station Control or 2740 model 2.

VERIFY

- This keyword operand was specified for a line that is not a 3275 line.
- The parameter was not specified YES or NO.

G520 3275 LINEGRP STMT MUST PRECEDE CONFIG STMT.

Explanation: The CONFIG statement can only be specified within 3275 switched line groups.

G521 CONFIG STATEMENT SPECIFICATION LIMIT EXCEEDED.

Explanation: More than 255 CONFIG statements were specified.

G522 ANTICIPATED 3275 TERMINAL SPECIFICATION WILL EXCEED MAXIMUM ALLOWABLE TERMINALS; CONFIG STATEMENT SPECIFICATION IS IGNORED.

Explanation: This is a warning message: 5000 terminals have already been defined, the CONFIG statement is ignored.

G523 REQUIRED CONFIG STATEMENT LABEL OMITTED.

Explanation: Each CONFIG statement must be labeled.

G524 FOLLOWING KEYWORD SPECIFICATIONS ARE INVALID: list

Explanation: The list can include one or more of the following: FEAT, MODEL, OPTIONS, PTRSIZE.

By operand, detected errors are as follows:

FEAT

- More than three parameters were specified.
- No valid parameter specifications were made.
- Conflicting parameter specifications were made.

MODEL

This operand was not specified as 1 or 2.

OPTIONS

- More than two parameters were specified.
- No valid parameter specifications were made.
- Conflicting parameter specifications were made.

PTRSIZE

This operand was not specified as 120, 126, or 132.

G540 3275 LINE STMT MUST PRECEDE IDLIST STMT.

Explanation: The IDLIST statement can only be specified within 3275 switched line groups and must be

preceded by a LINE statement.

G541 IDLIST STATEMENT SPECIFICATION LIMIT EXCEEDED.

Explanation: More than 1000 IDLIST statements were specified.

G542 LINE IDLIST STMT SPECIFICATION LIMIT EXCEEDED.

Explanation: Only one IDLIST statement can be specified for each line.

G543 SPECIFIED IDLIST STMT LABEL IS INVALID.

Explanation: The specified label exceeds 8 characters.

G544 NO IDLIST STATEMENT POSITIONAL PARAMETERS SPECIFIED. IDLIST STATEMENT IS IGNORED.

Explanation: Positional parameters are required, but none were found.

G545 MAXIMUM ALLOWABLE ID ENTRIES EXCEEDED.

Explanation: The combined total of positional parameters specified on all IDLIST statements cannot exceed 5000.

G546 POSITIONAL PARAMETER IS INVALID; POSITIONAL PARAMETER NUMBER number

Explanation: Either the first sublist entry in the referenced positional parameter was not 6 alphanumeric characters, or the second sublist entry exceeded 8 alphanumeric characters.

G547 REFERENCED CONFIG STATEMENT NOT FOUND. POSITIONAL PARAMETER NUMBER number

Explanation: The second sublist entry in the referenced positional parameter refers to the label of a CONFIG statement which has not been previously defined.

G560 MULT SYST SPECIFICATIONS MUST PRECEDE VTAM TERMINAL SPECIFICATIONS.

Explanation: Multiple system definition statements must precede the VTAM definition statements.

G561 MSLINK STATEMENT SPECIFICATION EXCEEDED.

Explanation: The number of MSLINK statements cannot exceed 676.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G562 PARTNER ID OMITTED OR INVALID.

Explanation: One of the following occurred:

- The required operand was not specified.
- The PARTNER ID specified was not a 2-character alphabetic field.

G563 PARTNER ID PREVIOUSLY SPECIFIED.

Explanation: The PARTNER ID specified is a duplicate of one specified on a previous MSLINK statement. The PARTNER ID name must be unique.

G564 MSPLINK NAME INVALID OR NOT PREVIOUSLY DEFINED IN MSPLINK MACRO.

Or for LGEN

MSPLINK NAME, name, INVALID OR NOT PREVIOUSLY DEFINED IN A MSPLINK MACRO. THE ERROR IS IN MSLINK MACRO NUMBER number.

Explanation: The first message is issued for a standard system definition and the second message is issued for a LGEN system definition.

One of the following occurred:

- The MSPLINK name specified did not begin with a letter and contain from 1 to 8 alphanumeric characters.
- The MSPLINK name specified was not defined by a previous MSPLINK statement.
- The value begins with the string 'DFS' or 'DBCDM', or it contains a reserved word.

The MSPLINK name and the defined order number of the MSLINK statement are provided for the LGEN message.

System Action: Stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun Stage 1.

Severity: 4

G565 **MSPLINK NAME SPECIFIED BY PREVIOUS MSLINK MACRO.**

Or for LGEN

MSPLINK OF, *name*, HAS BEEN SPECIFIED BY A PREVIOUS MSLINK MACRO. THE ERROR IS IN MSLINK MACRO NUMBER number.

Explanation: The first message is issued for a standard system definition and the second message is issued for a LGEN system definition.

The MSPLINK name specified is a duplicate of a name specified on a previous MSLINK statement.

The defined order number of the MSLINK statement is provided for the LGEN statement.

System Action: Stage 1 does not complete successfully.

Programmer Response: Correct the specification and rerun Stage 1.

Severity: 4

G566 **OPTIONS PARAMETER INVALID**

Explanation: This message might be issued by the MSPLINK or the MSLINK macro. One of the following occurred:

- An operand other than SYNCSESS, FORCSESS, ASR, or NOASR was specified on the OPTIONS parameter.
- ASR was specified, but TYPE=VTAM was not specified on the MSPLINK macro.
- Both ASR and NOASR or SYNCSESS and FORCSESS were specified (for example, OPTIONS=(ASR,NOASR)).

System Action: Stage one will not complete successfully.

G567 **OPTIONS OPERAND PRESENT, BUT MSPLINK IS OMITTED OR NOT MSC/VTAM.**

Or for LGEN

OPTIONS OPERAND PRESENT, BUT MSPLINK IS OMITTED OR NOT MSC/VTAM IN MSLINK MACRO NUMBER number.

Explanation: The first message is issued for a standard system definition and the second message is issued for a LGEN system definition.

The OPTIONS operand was specified on the MSLINK macro, but the MSPLINK operand was omitted, or the MSPLINK specified was not type MSC/VTAM. The defined order of the MSLINK statement is provided for the LGEN message.

System Action: The indicated value (ASR, NOASR, SYNCSESS or FORCSESS) will be set in the CTB.

Severity: 2

G568 **MODE TABLE SPECIFICATION INVALID.**

Or for LGEN

MODE TABLE SPECIFICATION IS INVALID FOR MSLINK NUMBER number.

Explanation: The first message is for a standard system definition and the second message is for a LGEN system definition.

The message might be issued by the MSLINK or MSPLINK macros or by the DCLIST internal macro. The MODETBL specification did not begin with a letter or contain 1 to 8 alphanumeric characters. This parameter is valid only if TYPE=VTAM was specified on the MSPLINK macro.

The defined order of the MSLINK statement is provided for the LGEN message.

System Action: The parameter is ignored.

Severity: 2

G570 **MSLINK BACKUP PARAMETER INVALID**

Explanation: The value specified for the BACKUP keyword on the MSLINK macro was less than 1 or greater than 7.

G0579 **MSPLINK, MSLINK AND MSNAME MUST HAVE AT LEAST ONE OF EACH MACRO TYPE SPECIFIED.**

Explanation: When one of the MSC macros listed in the message text is coded, at least one of each of type must be coded in the system definition.

System Action: Stage one will not complete successfully.

Programmer Response: Code at least one each of the MSPLINK, MSLINK, and MSNAME macros in the system definition.

Severity: 4

G580 **MSNAME STATEMENT SPECIFICATION EXCEEDED.**

Explanation: The number of MSNAME statements cannot exceed 255.

G581 MSNAME LINKNAME OMITTED OR INVALID.

Explanation: One of the following occurred:

- The required operand was not specified.
- The link name specified on the MSNAME statement did not begin with a letter and contain from 1 to 8 alphanumeric characters.

G582 SYSID SPECIFICATION OMITTED OR INVALID.

Explanation: One of the following occurred:

- The required operand was not specified.
- The operand was not specified as two numeric parameters, both being between the range of l and 255.
- The value of the first parameter is identical to the second.

G583 SYSID SPECIFIED PREVIOUSLY AS A REMOTE OR LOCAL SYSID.

Explanation: A parameter specified for the SYSID is a duplicate of one specified as a remote or local SYSID on a previous MSNAME statement.

G584 MSLINK STATEMENT MUST PRECEDE MSNAME STATEMENT.

Explanation: The input sequence of IMS system definition statements requires that the MSLINK statement precede the MSNAME statements. Each MSNAME statement must be used in conjunction with the preceding MSLINK statement.

G585 MSNAME IS A DUPLICATE LINKNAME.

Explanation: The link name was also specified as the link name in an earlier MSNAME statement.

G586 MSNAME IS DEFINED AS AN LTERM.

Explanation: The specified link name was also specified as a logical terminal name.

G587 MSNAME IS DEFINED AS A TRANSACT CODE.

Explanation: The specified link name was also specified as a transaction code.

G600 CTLUNIT SPECIFICATION CANNOT OCCUR BEFORE LINE. CTLUNIT STATEMENT IGNORED.

Explanation: The input sequence of IMS system definition statements requires that the LINE statement must precede the CTLUNIT statement. The CTLUNIT statement must be used in conjunction with a preceding LINE statement. System definition has ignored the CTLUNIT statement. The statement has not been added into the maximum count for CTLUNIT statements.

G601 CTLUNIT SPECIFICATION LIMIT EXCEEDED.

Explanation: More than 1000 CTLUNIT statements have been specified.

G602 CTLUNIT STMT IS INVALID FOR THIS LINEGRP.

Explanation: The CTLUNIT statement is valid for the 2260, 2980, and 3270 remote line groups only.

G603 ADDR OPERAND IS OMITTED OR INVALID.

Explanation: One of the following occurred:

- The operand was omitted.
- The operand was not a valid, 2-digit hexadecimal address.
- More than one parameter was specified.
- The operand was specified for a 2260 local line group.
- The operand was not the hexadecimal representation of an alphabetic character A through Z for a 2972 control unit.

G604 WLA OPERAND IS INVALID.

Explanation: One of the following occurred:

- The operand was specified for a 2980 or 3270 remote BTAM line group.
- The operand was specified for a 2260 local line group and the second parameter was not omitted.
- More than two parameters were specified.
- The first parameter was specified but was not YES or NO.
- The second parameter was specified but was not 1053.

G605 MODEL OPERAND IS INVALID.

Explanation: One of the following occurred. The MODEL operand was specified:

- For a 2980 line group.
- As other than 1 or 2 for a 3270 remote BTAM line group.
- As other than 1, 2, or 3 for a 2260 line group.
- With more than one parameter.

G606 BUFSIZE OPERAND IS INVALID.

Explanation: One of the following has occurred:

- More than one operand was specified.
- The operand was specified for a line group which was not a 2980 line group.
- The value specified was not 48 or 96.
- This operand was specified as 96, but FEAT=BUFEXP was not specified on the preceding LINE macro.

STATION

G650 STATION SPECIFICATION CANNOT PRECEDE LINE.

Explanation: The input sequence of IMS system definition statements requires that the LINE statement must precede the STATION statement. The STATION statement must be used in conjunction with a preceding LINE statement.

G651 STATION STMT IS INVALID FOR THIS LINEGRP.

Explanation: The STATION statement is valid for System/3 and System/7 line groups only.

G653 ADDR OPERAND IS OMITTED OR INVALID.

Explanation: One of the following occurred:

- The operand was omitted for a noncontention station.
- The operand was not specified as 2 valid hexadecimal digits.
- More than one parameter was specified.

G654 ALIGN OPERAND IS INVALID.

Explanation: The operand was specified as other than 0, 2, 4, or 8, or with more than one parameter.

G655 TRANSLM OPERAND IS INVALID.

Explanation: The operand was specified as other than a decimal number from 0 to 15, or with more than one parameter.

G656 TYPE OPERAND IS INVALID.

Explanation: One of the following occurred:

- The first operand was not specified as ASK or NOASK.
- The second operand was not specified as POSTPONE or NOPOSTPONE.
- More than two operands were specified.

G657 FEAT OPERAND IS INVALID.

Explanation: One of the following occurred. The FEAT operand was specified:

- With a System/3 or System/7 line group.
- As other than PTTC/EBCD, PSEUDOBIN, or MIXED.
- With more than one parameter.

G659 CONTENTION LINES MAY NOT BE MULTI-STATION.

Explanation: This is the second or subsequent STATION statement encountered for this System/3 or System/7 contention line. Only one STATION statement can be specified for a contention line.
TERMINAL

G700 TERMINAL SPECIFICATION CANNOT PRECEDE LINE.

Explanation: The input sequence of IMS system definition statements requires that the LINE statement must precede the TERMINAL statement. The TERMINAL statement must be used in conjunction with a preceding TYPE or LINE statement.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G701 3275 TERMINAL DEFINITION MUST PRECEDE CTLUNIT.

Explanation: Within a 3270 remote BTAM line group, a CTLUNIT statement for this line cannot precede any 3275 TERMINAL statement.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G702 TERMINAL SPECIFICATION CANNOT PRECEDE CTLUNIT.

Explanation: Within a 3270 remote BTAM line group, a CTLUNIT statement for each line must be specified preceding any 3270 remote BTAM TERMINAL statement.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G703 TERMINAL SPECIFICATION CANNOT PRECEDE STATION.

Explanation: System/3 and System/7 TERMINAL statements must be used in conjunction with a preceding STATION statement.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G705 ADDR OPERAND IS OMITTED OR INVALID.

Explanation: The ADDR operand was specified for a VTAM terminal, or was omitted for a terminal which does not allow its omission, the operand was specified incorrectly for the terminal being defined, or more than one parameter was specified.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G706 NAME OPERAND IS OMITTED OR INVALID.

Explanation: One of the following occurred. The operand:

- Was specified for a non-VTAM terminal.
- Was not specified for a VTAM terminal.
- Exceeded 8 alphanumeric characters.
- Did not begin with an alphabetic character.
- Contained more than one parameter.
- The value begins with the string 'DFS' or 'DBCDM', or it contains a reserved word.

System Action: Stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G707 SPECIFIED VTAM NODE NAME IS A DUPLICATE.

Explanation: The VTAM node name specified was previously specified as a VTAM node name on a TERMINAL or MSPLINK macro.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G708 OUTPUT EDIT ROUTINE REQUEST IS IGNORED.

Explanation: This is a warning message. EDIT=YES was specified on this TERMINAL statement to request an output edit routine for this terminal, but the respective edit routine name was not specified using the TYPE or LINEGRP statement associated with this TERMINAL statement.

System Action: The OUTPUT EDIT specification is ignored.

Programmer Response: No action is required.

Severity: 2

G709 INPUT EDIT ROUTINE REQUEST IS IGNORED.

Explanation: This is a warning message. EDIT=YES was specified in this TERMINAL statement to request an input edit routine for this terminal, but the respective edit routine name was not specified using the TYPE or LINEGRP statement associated with this TERMINAL statement.

System Action: The INPUT EDIT specification is ignored.

Programmer Response: No action is required.

Severity: 2

G710 LTERM OPERAND IS REQUIRED.

Explanation: This operand is required for READER terminals.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G711 LTERM VALUE IS NOT A PREVIOUSLY-DEFINED LTERM.

Explanation: The NAME statement referenced does not precede this TERMINAL statement.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G712 LTERM VALUE CHANGED TO INDICATE THE FIRST NAME FOR DESIGNATED TERMINAL—name

Explanation: This is a warning message. An attempt was made to select other than the first logical terminal name defined under the referenced TERMINAL statement.

System Action: The LTERM value is changed.

Programmer Response: No action is required.

Severity: 2

G713 IDLIST STMT REQUIRED FOR THIS TERMINAL STMT

Explanation: Due to the specifications on the LINE statement (VERIFY=YES) for this 3275 switched terminal, an IDLIST statement must be specified prior to this TERMINAL statement.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G715 ADDR VALUE HAS BEEN PREVIOUSLY SPECIFIED.

Explanation: The specified 3270 BTAM ADDR keyword operand value was equal to a previously specified non-3270 BTAM line address or to a previously specified 3270 BTAM terminal ADDR keyword operand value.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G716 MULTI-DROP 2740 NSC, 2741, LOCAL 3284/3286 WITH 3277, AND SYSIN/SYSOUT TERMINALS INVALID.

Explanation: One of the following occurred:

- More than one 2741 or LOCAL READER/SYSOUT terminal was specified for a line.
- FEAT=NONSWITCHED and UNITYPE=(2740,NOSTACTL) were specified on the LINEGRP statement. However, more than one TERMINAL statement was provided for the line. Only one 2740, non-station control terminal per line is allowable.
- A local 3270 line was specified with 3284/3286 printers on the same line with 3277 terminals.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G717 SESSION BACKUP PARAMETER INVALID

Explanation: One of the following BACKUP keyword restrictions on the TERMINAL macro was violated:

- The first BACKUP value must be set to NO or to a value from 1 through 7.
- If two BACKUP values were specified, the second BACKUP value must be set to YES or NO.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G719 SWITCHED TERMINALS CANNOT BE MULTI-DROPPED.

Explanation: This TERMINAL statement defines a second or subsequent terminal on a switched line.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G720 LUTYPE6 LINK ALREADY DEFINED FOR XRF

Explanation: An Intersystem Communication (ISC) link for communication between the active system and the alternate system was already defined by a previous NAME keyword that contained two operands (node names).

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G721 THE FOLLOWING OPERANDS ARE INVALID: list

Explanation: The list can include one or more of the following: BUFSIZE, COMPT(N), EDIT, ERROPT, FEAT, FPBUF, HEADCTL, LTERM, MDISEG, MODEL, MODETBL, MSGDEL, OPTIONS, OUTBUF, PAGDEL, PTRSIZE, PTSEG, REPLACE, SEGSIZE, SESSION,

SIZE, TYPE, UNIT, or VERCHK.

By operand, one of the listed errors was detected:

BUFSIZE

- This keyword operand was specified for other than a 2740 Model 2, 3270 terminals with a 3284/3286, and 3275 terminals with a PTR1 component.
- It is invalid for 3270 and 3275 terminals if the PTRSIZE keyword operand was specified.
- More than one parameter was specified, or the specified parameter was not 120, 126, or 132 for a 3270/3275, and 120, 248, or 440 for a 2740 Model 2.

COMPT(N)

- This keyword operand was specified for other than 3270 remote, 3601, SLUTYPE1, SLUTYPEP, and LUTYPE6 terminal types.
- The parameters specified were not unique.
- FEAT=INPUT was specified, but the COMPT= keyword operand was not specified.
- Only certain combinations of parameters and terminal types are valid.

  See the TERMINAL macro description in *IMS Version 9: Installation Volume 2: System Definition and Tailoring* for a description of valid combinations.

EDIT

- More than two parameters were specified.
- One of the specified parameters was not YES or NO.

ERROPT

- The operand was specified for other than a terminal containing a magnetic data inscriber (MDI) component.
- The operand was not IGNORE, ACCEPT, or REJECT.

FEAT

- The operand was specified for a terminal type that does not allow such specification.
- The operand was specified incorrectly for the terminal type.

FPBUF

- More than one parameter was specified.
- A nonzero operand was specified for a terminal type that does not allow such specification.
- The specified operand was not zero or a decimal number within the range 12-32767 (32757 if output edit is specified for this terminal).
- A nonzero operand was specified for a terminal that also specified, or defaulted to, one of the following options: NORESP, BID, NPGDEL, or (PAGDEL=NO).
- A nonzero operand was specified for a 2740 terminal that did not specify RESP=TERM on its LINE macro statement.
- The value specified must not be greater than the logical record length of the long message queue data set specified in the RECLING= parameter of the MSGQUEUE macro.

HEADCTL

- The operand was specified for other than a 2740 Model 2 terminal.
- The operand was not specified as a decimal number from 0 through 28 and a multiple of 4.
- More than one parameter was specified.

LTERM

- More than one parameter was specified.
- The operand was specified for a switched terminal.
- The LTERM specified is associated with the master terminal or secondary master terminal.
- A VTAM terminal cannot specify the LTERM operand. Shared LTERM is not supported for VTAM.

MDISEG

- The operand was specified for other than a terminal containing a magnetic data inscriber (MDI) component.
- The operand was not a decimal number less than 10000.

MODEL

- The operand was specified for other than a 3270 terminal.
- More than one parameter was specified.
- The parameter was specified, but was not l or 2.

MODETBL

- More than one parameter was specified.
- The parameter exceeded 8 characters.
- The parameter did not begin with an alphabetic character.
- More than 255 unique mode table entry names were specified.

MSGDEL

- The specified logical terminal has been defined as the IMS master terminal.
- The operand was not specified NONE, SYSINFO, or NONIOPCB.
- More than one parameter was specified.

OPTIONS

- More options than allowed were specified for the defined terminal type.

- One or more of the specified parameters were invalid.

OUTBUF
- The operand was specified for a terminal type that does not allow specification.
- More than one parameter was specified.
- The parameter was specified, but was not a decimal number within the range of acceptable values for that terminal type.

PAGDEL
- The operand was specified for other than a 3270 BTAM terminal containing a video component.
- The operand was not specified YES or NO.
- More than one parameter was specified.

PTRSIZE
- This keyword operand was specified for other than 3270 terminals with a 3284/3286 and with 3275 terminals with a PTR1 component.
- More than one parameter was specified, or the specified parameter was not 120, 126, or 132.

PTSEG
- The operand was specified for other than a terminal containing a paper tape (PT) or a paper tape reader (PTRDR) component.
- The operand was not a decimal number less than 10000.

REPLACE
- The operand was specified for other than a terminal containing a magnetic data inscriber (MDI) component.
- The operand was not 2 hexadecimal digits.

SEGSIZE
- More than one parameter was specified.
- The operand was specified for a terminal type that does not allow such specification.
- The specified parameter was not a decimal number within the range of acceptable values for that terminal type.

SESSION
- The operand was specified for a terminal type other than LUTYPE6.
- The specified parameter was not a decimal number in the range 1-255.

SIZE
- There are not exactly two parameters.
- The first value is not a number in the range 1- 16384.
- The second value is not a number in the range 2- 16384.
- The product of the two values is not a number in the range 80- 16384.
- The operand was specified for a terminal type other than 3270 or SLUTYPE2.
- The operand was specified for a terminal that also specified UNIT=3284 or 3286.

TYPE
- The parameter was not in the format '3270-Ann' where 'nn' is a 1-digit number from 1 to 9, inclusive, or a 2-digit number from 01 to 15, inclusive.
- The operand was specified for a terminal type other than 3270 or SLUTYPE2.
- The operand was specified for a terminal that also specified UNIT=3284 or 3286.

UNIT
- The operand was specified for a terminal within a line group that does not allow specification.
- The operand was specified incorrectly.

  For a 3270 local line group, the UNIT keyword operand specification is in direct conflict with the LINE macro BUFSIZE keyword operand specifications.

  For a description of valid operands, see the description of the TERMINAL macro in *IMS Version 9: Installation Volume 2: System Definition and Tailoring*.

VERCHK
- The operand was specified for other than a 2770 terminal containing a magnetic data inscriber (MDI) component.
- The operand was not NOCHK or VOKCHK.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G722 THE FOLLOWING OPERANDS ARE IGNORED: list

Explanation: This is a warning message. The list can include one or more of the following: MSGDEL, MODETBL, NORELRQ, OPTIONS, PAGEDEL, or RELRQ.

MSGDEL
- For VTAM terminals, specification of NONE is ignored, and the SYSINFO default is used.

MODETBL

- The operand was specified for a terminal type that does not allow such specification.

NORELRQ

- For non-VTAM terminals, NORELRQ is ignored and RELRQ is used.
- For valid terminals, if NORELRQ and RELRQ are both specified, NORELRQ is ignored and RELRQ is used.

OPTIONS

- For 2740 Model 2 terminals, NORESP, FORCRESP, and TRANSRESP are ignored.
- For 2770 and 3601 terminals without correct COMPT operand specification, NPGDEL and PAGDEL are ignored.
- For 3600 and SLUTYPEP terminals, FPACK or NFPACK are ignored if FPBUF=0.
- For 3270 and SLUTYPE2 terminals, TRSOSI or NOTRSOSI is ignored.

PAGDEL

- For 2770 and 3601 terminals without correct components, PAGDEL was ignored.

RELRQ

- For VTAM 3270 local terminals and VTAM 3275/3277 remote terminals, RELRQ is not a valid option and is ignored.
- For SLUTYPE2 terminals, RELRQ is not a valid option and is ignored.
- For NTO terminals, RELRQ is not a valid option and is ignored.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G723 COMBINATION OF FORCED RESPONSE AND NO AUTOMATIC PAGE DELETION IS NOT RECOMMENDED, AND MAY CAUSE OTHER THAN DESIRED RESULTS DURING EXECUTION.

Explanation: This is a warning message. The combination of "OPTIONS=FORCRESP" and "OPTIONS=NPGDEL" (or "PAGDEL=NO") could cause a terminal to become locked during execution.

System Action: No action is taken.

Programmer Response: No action is required.

Severity: 2

G724 WARNING: SIZE OPERAND FOR DISPLAY EXCEEDS 255 AND MAY BE INCONSISTENT WITH VTAM REQUIREMENTS

Explanation: This is a warning message. One of the SIZE parameters specified a number larger than 255 lines or columns for a SLUTYPE2 terminal. This might cause a conflict with VTAM BIND parameters.

System Action: No action is taken.

Programmer Response: No action is required.

Severity: 2

G725 TYPE/SIZE PARAMETER COMBINATION IS INVALID

Explanation: One of the following occurred:

- No valid screen size has been declared for this symbolic name.
- No symbolic name is specified for this screen size.
- The screen size declared for the specified symbolic name is not the same as that previously declared for the same symbolic name.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G728 SECOND NODE NAME FOR MASTER ALREADY DEFINED OR INVALID

Explanation: The second operand (node name) for the master terminal was invalid or was already defined in a NAME keyword on a previous TERMINAL macro.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G729 NAMES DO NOT MATCH APPLID NAMES IN COMM MACRO

Explanation: In order to define an Intersystem Communication (ISC) link for communication between the active system and the alternate system, both operands (node names) in the NAME keyword on the TERMINAL macro must match the operands in the APPLID keyword on the COMM macro.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G730 ASR OPTION IS NOT VALID FOR THIS DEVICE TYPE

Explanation: This is a warning message and might be issued by the TYPE or the TERMINAL macro. ASR was specified on the OPTIONS parameter, but the ASR specification is valid for SNA VTAM devices only.

System Action: The ASR specification is ignored.

Programmer Response: No action is required.

Severity: 2

G731 NUMBER OF VTAM TERMINALS DEFINED EXCEEDS MAXIMUM

Explanation: The number of VTAM terminals defined exceeded the maximum. Reduce the number of terminals you defined.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G732 DPM-xxx NOT VALID FOR LU6 XRF LINK, DEFAULT ASSUMED.

Explanation: The TERMINAL macro issues this message because the DPM=xxx subparameter is not allowed for the XRF/ISC link.

System Action: The default value of VLVB is used.

Programmer Response: No action is required.

Severity: 2

NAME

G800 NAME SPECIFICATION CANNOT PRECEDE TERMINAL OR MSNAME. NAME STATEMENT IGNORED.

Explanation: The input sequence of IMS system definition statements requires that a TERMINAL or MSNAME statement precede the NAME statement. The NAME statement must be used in conjunction with a preceding TERMINAL or MSNAME statement. System definition has ignored this NAME statement and has not verified whether the names referenced are duplicates. The statement has not been added into the maximum count for terminals and remote terminals.

G802 COMPT OPERAND IS INVALID.

Explanation: One of the following occurred:

- The operand was specified for a terminal type that does not allow such specification.
- The operand was specified incorrectly for the terminal type defined. See *IMS Version 9: Installation Volume 2: System Definition and Tailoring* for a description of valid specifications for each terminal.

G803 OUTPUT TERMINAL NOT DEFINED OR INVALID

Explanation: One of the following occurred:

- The OUTPUT keyword operand specified was not specified as the label field of a TERMINAL statement preceding the previous TERMINAL statement.
- A VTAM LTERM cannot be defined as a split LTERM. For VTAM, the input and output terminal must be the same physical terminal.

G804 EDIT OPERAND IS INVALID.

Explanation: One of the following occurred:

- The operand contained more than 2 parameters.
- The first parameter was specified, but was not YES or NO.
- The second parameter was specified, but was not UC or ULC.

G805 LTERM PARAMETER number IS OMITTED OR INVALID.

Explanation: One of the following occurred:

- No positional parameters were specified.
- A positional parameter was specified with more than 2 subparameters.
- A first subparameter was specified, which is not a 1- to 8- character name.
- A second subparameter was specified which is not MASTER or SECONDARY.

G806 SPECIFIED LTERM IS A DUPLICATE—name.

Explanation: The logical terminal name was previously specified.

G807 SPECIFIED LTERM PREVIOUSLY DEFINED AS A TRANSACTION CODE—name.

Explanation: Transaction codes and logical terminal names collectively cannot contain duplicates.

G808 MULTIPLE MASTER SPECIFICATIONS ARE INVALID.

Explanation: A NAME statement LTERM positional parameter specified as a sublist and containing a specified second parameter of MASTER was previously specified.

G809 MULTIPLE SECONDARY SPECIFICATIONS ARE INVALID.

Explanation: A NAME statement LTERM positional parameter, with the subparameter SECONDARY, was previously specified.

G810 OUTPUT OPERAND IS INVALID FOR MASTER OR SECONDARY MASTER TERMINAL.

Explanation: The OUTPUT operand was specified when defining the MASTER or SECONDARY MASTER terminal with the LTERM positional parameter.

G811 ICOMPT/COMPT OPERAND SPECIFICATION IS INVALID FOR MASTER SPECIFICATION.

Explanation: The COMPT and ICOMPT operands do not refer to a console component of a terminal in defining the MASTER terminal.

G812 MASTER OR SECONDARY MASTER TERMINAL CANNOT BE ON A SWITCHED LINE.

Explanation: This NAME statement defined a MASTER or SECONDARY MASTER terminal. However, the LINEGRP statement specified FEAT=SWITCHED. This is an invalid combination. The IMS master or secondary master terminal cannot be on a switched line.

G813 MASTER TERMINAL MUST BE A 1050, 2740, 3275, 3277, SLUTYPE2, or 3767/3770/SLUTYPE1 CONSOLE.

Explanation: Only a 1050, 2740, 3275, 3277, a terminal defined as SLU, Type 2, a 3767, or the console component of a 3770 or a terminal defined as SLU, Type 1 is acceptable as the MASTER terminal. The 2740 terminal must contain the station control feature.

G814 SECONDARY MASTER TERMINAL MUST BE A 1050, 2740, 3284, 3286, 3767, 3770, SLUTYPE1, SPOOL, OR PRINTER.

Explanation: Only a 1050, 2740, 328x, 3767, the console component of a 3770, or the console or 3784 component of a terminal defined as SLU, Type 1, or a terminal on a line group defined as SPOOL or PRINTER is acceptable as the SECONDARY MASTER terminal.

System Action: The Stage 1 assembly fails.

Programmer Response: Specify the secondary master as one of the acceptable terminal types.

Severity: 4

G815 PRIMARY MASTER—SECONDARY MASTER COMBINATION SPECIFICATION INVALID.

Explanation: A 1050 or 2740 terminal type was specified. The MASTER and SECONDARY MASTER terminals are not associated with the same physical terminal.

G816 NAME STMT INVALID FOR PRECEDING TERMINAL STMT.

Explanation: One of the following occurred:

- NAME statements cannot follow TERMINAL statements containing LTERM keyword operand specifications or TERMINAL statements in switched line groups.
- The NAME macro statement followed a TERMINAL statement containing a SESSION keyword operand specifying a value greater than one. If parallel sessions are defined, the associated logical terminal names must be specified within a SUBPOOL.
- Multiple LTERM names are invalid when defining the XRF fixed LUTYPE6 surveillance link.

System Action: The Stage 1 assembly fails.

Programmer Response: Remove the NAME macro statements that caused the error.

Severity: 4

G817 ICOMPT OPERAND IS INVALID.

Explanation: One of the following occurred:

- The operand was specified for a terminal type that does not allow such specification.
- The operand was specified incorrectly for the terminal type defined.
- The operand referred to an output-only component of the terminal.

G818 MSGDEL=NONIOPCB INVALID FOR MASTER OR SECONDARY MASTER TERMINAL.

Explanation: MASTER or SECONDARY cannot be specified if:

- MSGDEL=NONIOPCB was specified on the preceding TERMINAL statement.
- MSGDEL=NONIOPCB was implied from the preceding TYPE statement.
- UNITYPE=3790 was specified for this terminal.

G819 ICOMPT OPERAND SPECIFICATION IS INVALID FOR SECONDARY SPECIFICATION.

Explanation: The ICOMPT operand does not refer to the first component of a terminal to define the

SECONDARY MASTER terminal.

G820 SPECIFIED LTERM PREVIOUSLY DEFINED AS AN MS LINKNAME—name.

Explanation: The specified logical terminal name was used previously to define a multiple systems link name.

G821 RESERVED NAME WAS USED FOR LTERM.

Explanation: The value begins with the string 'DFS' or 'DBCDM' or contains a reserved word.

System Action: Stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4
IMSGEN

G822 THE NUMBER OF LTERMS DEFINED EXCEEDS THE MAXIMUM

Explanation: The number of LTERMS defined in a stage 1 system definition:

- Exceeds the number that can be contained in one DFSCLC*xy* module for a standard system definition, or
- Exceeds the number that can be contained in 16 DFSCLC*xy* modules for a Large System Generation (LGEN) where *x* is the module number and *y* is the system definition suffix.

System Action: Stage 1 will not complete successfully.

Programmer Response: If the failure is in a standard system definition, then use LGEN. If the failure is in LGEN, then the ETO feature will need to be used.

Severity: 4

G898 UPDTPRT KEYWORD PARAMETER IS INVALID

Explanation: The UPDTPRT keyword does not contain ON or OFF, or has more that one parameter.

System Action: Stage 1 does not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G899 ONLY 2 SUBPARAMETERS ARE ALLOWED FOR ONEJOB= KEYWORD

Explanation: The ONEJOB= keyword must not have more than 2 subparameters and must have the value of YES or NO.

System Action: The Stage 1 assembly will not complete successfully.

Programmer Response: Probable syntax error. Correct the ONEJOB= parameter on the IMSGEN macro and re-run the Stage 1 assembly.

Severity: 4

G900 ONEJOB KEYWORD PARAMETER 1 OR 2 IS INVALID

Explanation: The ONEJOB= subparameters must have the value of YES or NO specified in parentheses.

System Action: The Stage 1 assembly will not complete successfully.

Programmer Response: Probable syntax error. Correct the ONEJOB= parameter on the IMSGEN macro and re-run the Stage 1 assembly.

Severity: 4

G901 JOBCTL= AND/OR SCL= PARM 1 WILL BE IGNORED WITH ONEJOB= PARM SPECIFIED

Explanation: The JOBCTL= and the SCL= subparameter 1 are mutually exclusive with ONEJOB=. When the ONEJOB=YES keyword is specified, it will cause the SCL= and the JOBCTL= subparameter 1 to be ignored.

System Action: The Stage 1 will complete normally.

Programmer Response: None.

Severity: 2

G902 TERM OPERAND IS INVALID; DEFAULT OF 'NO' ASSUMED.

Explanation: The parameter specified was not YES, NO, or a null value.

System Action: The default value of NO is used.

Programmer Response: No action is required.

Severity: 2

G903 MSGQUEUE STATEMENT NOT SPECIFIED.

Explanation: The MSGQUEUE statement is required for a DB/DC environment.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G904 SPECIFIED SIZE FOR GENERAL POOL IS TOO SMALL. SIZE IS ADJUSTED TO MINIMUM VALUE.

Explanation: This is a warning message. The pool size specified in the GENERAL operand on the BUFPOOLS statement must be large enough to accommodate all main storage scratch pad areas plus 10% of one disk scratch pad area.

System Action: The system will use the minimum value.

Programmer Response: No action required.

Severity: 2

G905 NO APPLCTN SPECIFICATIONS.

Explanation: No APPLCTN statements were specified within this IMS system definition.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G906 NO TRANSACTIONS SPECIFIED FOR THIS APPLCTN.

Explanation: This is a warning message. One of the following occurred:

- An APPLCTN statement was found with no TRANSACT statements following it.
- No TRANSACT statements were supplied in the input to the IMS system definition.

System Action: The stage 1 will complete successfully.

Programmer Response: No action is required.

Severity: 2

G908 NO DATA BASE SPECIFICATIONS.

Explanation: This is a warning message. No DATABASE statements were provided in the input to the IMS system definition.

System Action: The stage 1 will complete successfully.

Programmer Response: No action is required.

Severity: 2

G909 NO COMMUNICATION SPECIFICATIONS.

Explanation: No BTAM or VTAM terminals or multiple system communication links were defined within this IMS system definition.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G910 NO LINES SPECIFIED FOR THIS LINEGRP.

Explanation: No LINE statements were specified within this LINEGRP definition.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G911 NO TERMINALS SPECIFIED FOR THIS LINE.

Explanation: No TERMINAL statements were provided for the LINE being defined. This error message might be generated erroneously, if a previous error message describing a communication configuration error is received.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G912 NO CTLUNITS SPECIFIED FOR THIS LINE.

Explanation: No CTLUNIT statements were provided for the line being defined. This error message might be generated erroneously, if a previous error message describing a communication configuration error was received.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G913 NO TERMINALS SPECIFIED FOR THIS CTLUNIT.

Explanation: No TERMINAL statements were provided for the CTLUNIT being defined.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G914 NO NAMES SPECIFIED FOR THIS TERMINAL.

Explanation: No NAME statements were provided for the TERMINAL being defined, therefore, no logical terminal name was specified for this physical terminal.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G916 THE FESEXIT KEYWORD COMM MACRO IS MISSING OR INVALID

Explanation: FESEXIT=YES is expected, but FESEXIT=NO has been coded in the COMM macro.

System Action: Stage 1 completes with return code 4.

Programmer Response: To activate Front End Switch, specify both OPTION=FES in the TERMINAL macro and FESEXIT=YES in the COMM macro. To deactivate FES, either eliminate OPTION= and FESEXIT= statements completely or specify OPTION=NOFES and FESEXIT=NO. OPTION=NOFES and FESEXIT=NO are the defaults.

Severity: 2

G917 NO MASTER TERMINAL SPECIFICATION.

Explanation: None of the NAME statements defined the MASTER specification in a logical terminal parameter. An IMS master terminal was not defined for this system.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G918 PROCLIB OPERAND IS INVALID; DEFAULTS ASSUMED.

Explanation: This is a warning message. One of the following occurred:

- The operand contained more than two parameters.
- The first parameter was specified but was not YES or NO.
- The second parameter was specified but was not a decimal number.

System Action: The default value of PROCLIB=(YES,7) is used.

Programmer Response: No action is required.

Severity: 2

G919 MACLIB OPERAND IS OBSOLETE.

Explanation: System definition no longer creates a copy job step for the macros. SMP/E places the macros into the databases with the low order names of ADFSMAC and SDFSMAC.

System Action: System definition continues.

Programmer Response: No action is required. Remove the MACLIB operand from the IMSGEN macro call to eliminate this message the next time system definition runs.

Severity: 2

G920 PAGE OPERAND IS INVALID; DEFAULT ASSUMED.

Explanation: This is a warning message. The operand was not specified as YES or NO.

System Action: The default value of PAGE=NO is used.

Programmer Response: No action is required.

Severity: 2

G921 PAGE SPECIFICATION WILL BE INEFFECTIVE.

Explanation: This is a warning message.

System Action: The stage 1 will complete successfully.

Programmer Response: See the IMSGEN macro PAGE keyword specification in *IMS Version 9: Installation Volume 2: System Definition and Tailoring*.

Severity: 2

G922 SUFFIX OPERAND IS INVALID; DEFAULT ASSUMED.

Explanation: This is a warning message. The SUFFIX keyword operand was not specified as 1 alphanumeric character.

System Action: The default value of 0 is used.

Programmer Response: Change the SUFFIX operand if 0 is not the suffix to be used.

Severity: 2

G923 THE FOLLOWING OPERANDS ARE INVALID: list

Explanation: The list can include one or more of the following: OBJDSET, USERLIB, SYSMAC, MODGEN, UMAC1, UMAC2 or UMAC3.

The specified operand contains more than 44 alphanumeric characters or does not begin with a letter.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G925 ASMPRT OPERAND IS INVALID; DEFAULT ASSUMED.

Explanation: This is a warning message. The operand was not specified ON or OFF.

System Action: The default value OFF is used.

Programmer Response: No action is required.

Severity: 2

G926 {JCL AND/OR SCL|JOBCTL AND/OR PRTY} KEYWORD SPECIFICATIONS INVALID. {JCL AND/OR SCL|JOBCTL AND/OR PRTY} DEFAULTS ASSUMED.

Explanation: This is a warning message that indicates that the following specifications are invalid:

- The JCL, the SCL, or both
- The JOBCTL keyword, the PRTY keyword, or both

System Action: Default values are assumed.

Programmer Response: No action is required.

Severity: 2

G928 NO TERMINALS SPECIFIED FOR THIS STATION.

Explanation: No TERMINAL statements were provided for the STATION being defined.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G929 THE FOLLOWING REMOTE 3270 TERMINAL CONFIGURATION IS INVALID IN RESPECT TO THE COPY FEATURE SPECIFIED FOR TERMINAL ADDRESS.

Explanation: Within this remote 3270 line group, the TERMINAL statement for the indicated 3277 terminal specified the desire for the COPY feature, and either no candidate printer was found, or the model numbers of the 3277 terminal and one of the candidate printers are not compatible.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G930 ASM OPERAND IS INVALID; DEFAULT OF 'HLASM,SYSLIN' ASSUMED.

Explanation: One of the following occurred:

- The first subparameter was not High Level Assembler. This is the only valid value for the first subparameter.
- More than two subparameters were specified.
- The second subparameter did not begin with an alphanumeric character.
- The second subparameter was longer than eight characters.

System Action: The default values of 'HLASM,SYSLIN' are used.

Programmer Response: No action is required.

Severity: 2

G931 LKSIZE OPERAND IS INVALID; DEFAULT ASSUMED.

Explanation: This is a warning message. One of the following occurred:

- More than two parameters were specified.
- The first parameter specification exceeded the maximum specification of 16384000 or 16000K.

- The second parameter specification exceeded the maximum specification of 65520 or 63K.

System Action: The Binder SIZE option defaults are used.

Programmer Response: No action is required.

Severity: 2

G932 LKRGN OPERAND IS INVALID; DEFAULT ASSUMED.

Explanation: This is a warning message. Either more than one parameter was specified or the length of the parameter exceeds 6 characters.

System Action: The default value of 4M is used.

Programmer Response: No action is required.

Severity: 2

G933 MFSTEST OPERAND IS INVALID.

Explanation: One of the following occurred:

- More than two parameters were specified.
- The first parameter was specified but was not YES or NO.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G935 SYSMSG OPERAND IS INVALID; DEFAULT ASSUMED.

Explanation: This is a warning message. The operand specified was not TIMESTAMP or NOTIMESTAMP.

System Action: The default value of NOTIMESTAMP is used.

Programmer Response: No action is required.

Severity: 2

G936 NODE OPERAND IS INVALID—operand.

Explanation: The specified operand contains more than 8 alphanumeric characters and does not begin with a letter, @, $, or #.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G937 IMSPLEX OPERAND IS INVALID. *operand*

Explanation: The operand specified by *operand* contains more than 35 characters (including embedded periods); a qualifier that begins with a character other than alphabetic, @, $, or #; or otherwise breaks the rules of z/OS data set naming conventions.

System Action: Stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun Stage 1.

Severity: 4

G939 SECCNT OPERAND IS INVALID; DEFAULT ASSUMED.

Explanation: This is a warning message. The operand specified was not a decimal number in the range 0-3.

System Action: The default value of 0 is used.

Programmer Response: No action is required.

Severity: 2

G940 PSWDSEC OPERAND IS INVALID; DEFAULT ASSUMED.

Explanation: This is a warning message. The operand specified was not YES, NO, or FORCE.

System Action: The default value of NO is used.

Programmer Response: No action is required.

Severity: 2

G941 TERMSEC OPERAND IS INVALID; DEFAULT ASSUMED.

Explanation: This is a warning message. The operand specified was not YES, NO, or FORCE.

System Action: The default value of NO is used.

Programmer Response: No action is required.

Severity: 2

G942 SECONDARY MASTER SPECIFICATION OMITTED OR INVALID.

Explanation: If a 3277 primary master terminal specification is made, a valid secondary master specification is required.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G943 RECANY BUFFERS DEFINED BUT NO VTAM TERMINALS. RECANY BUFFER SPECIFICATION IGNORED.

Explanation: This is a warning message. The COMM statement includes a specification of VTAM RECEIVE ANY buffers, but no VTAM terminals are defined in the system definition input.

System Action: The VTAM buffer specification is ignored.

Programmer Response: No action is required.

Severity: 2

G944 NO VTAM TERMINAL SPECIFICATION.

Explanation: A TYPE statement specification was found for which no TERMINAL statement was specified.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G945 VTAM RECEIVE ANY BUFFERS SPECIFICATION OMITTED OR INVALID.

Explanation: One of the following occurred:

- The number of VTAM RECEIVE ANY buffers in the COMM macro was 0.
- The size of the VTAM RECEIVE ANY buffers in the COMM macro was 0.
- THE RECANY keyword operand in the COMM macro was not specified although VTAM terminals were defined. This operand is required with VTAM terminals.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G946 COMM STATEMENT NOT SPECIFIED.

Explanation: No COMM statement was supplied in the input to the IMS system definition, although one or more VTAM terminals were defined.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G947 3270 VTAM TERMINAL CONFIGURATION IS INVALID IN RESPECT TO THE COPY FEATURE SPECIFIED FOR THIS TERMINAL.

Explanation: The TERMINAL statement for the indicated 3277 terminal specified the desire for the COPY feature, and either no candidate printer was found or the model numbers of the 3277 terminal and the candidate printer were not compatible.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G948 SPECIAL MASTER TERMINAL FORMATTING REQUEST IS IGNORED; REQUIRED CAPABILITY NOT SPECIFIED.

Explanation: This is a warning message. 3270 special master terminal formatting was requested, and either no 3270 BTAM or VTAM terminals were defined or no primary master terminal was defined.

System Action: The request is ignored.

Programmer Response: No action is required.

Severity: 2

G949 JOBCTL AND/OR PRTY SPECIFICATIONS ARE MUTUALLY EXCLUSIVE WITH JCL AND/OR SCL SPECIFICATIONS. JCL/SCL DEFAULTS OR SPECIFICATIONS ASSUMED.

Explanation: This is a warning message. The JCL or the SCL, or both, keywords are mutually exclusive with the JOBCTL or the PRTY, or both, keywords. More than one set cannot be specified.

System Action: JOBCTL/PRTY specifications will be ignored; JCL/SCL specifications or defaults will be assumed.

Programmer Response: No action is required.

Severity: 2

G950 REMOTE SYSID DEFINED BUT NO MSNAME RESOURCES DEFINED

Explanation: A remote system ID was specified in the SYSID= keyword operand of an APPLCTN or TRANSACT statement, but no MSNAME statements were specified.

System Action: The stage 1 will not complete.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G951 **THIS REMOTE SYSID WAS NOT SPECIFIED AS A REMOTE SYSID IN ANY MSNAME STMT.**

Explanation: A remote system ID, specified in the SYSID= keyword operand of an APPLCTN statement, was not specified as a remote system ID in any MSNAME statement in the input to this IMS system definition.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G952 **LOGICAL LINKS DEFINED BUT NO PHYSICAL LINKS.**

Explanation: No MSPLINK statements were specified in this IMS system definition, although one or more MSLINK statements were specified to define logical links.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G953 **PHYSICAL LINKS DEFINED BUT NO LOGICAL LINKS.**

Explanation: No MSLINK statements were specified in this IMS system definition, although one or more MSPLINK statements were specified to define physical links.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G954 **NO MSNAMES SPECIFIED WITH THIS LOGICAL LINK.**

Explanation: This is a warning message. An MSLINK statement was specified with no associated MSNAME statements. Failure to provide at least one MSNAME SYSID statement results in abend U0833.

This error message might be generated erroneously if a previous error message describing a communication configuration error is received.

System Action: The stage 1 will complete successfully.

Programmer Response: No action is required.

Severity: 2

G955 **NO REMOTE LTERMS SPECIFIED FOR THIS LOGICAL LINK.**

Explanation: This is a warning message. An MSNAME statement was specified with no associated NAME statements. This error message might be generated erroneously if a previous error message describing a communication configuration error is received.

System Action: The stage 1 will complete successfully.

Programmer Response: No action is required.

Severity: 2

G956 **MSVERIFY DEFINITION TYPE IS INVALID; NO VALID MS STATEMENT SPECIFICATIONS.**

Explanation: MSVERIFY was specified in the IMSCTRL statement as the type of IMS generation, but no valid multiple system definition statements were contained in the input to this system definition.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G957 **IMSCTRL MSVID SPECIFICATION IGNORED; NO VALID MS STATEMENT SPECIFICATIONS.**

Explanation: This is a warning message. The MSVID keyword operand was specified in the IMSCTRL statement, but no valid multiple system definition statements were contained in the input to this system definition.

System Action: The operand was ignored.

Programmer Response: No action is required.

Severity: 2

G959 **FAST PATH MESSAGE-DRIVEN APPLCTN(S) DEFINED BUT NO TERMINAL ELIGIBLE TO ENTER FP TRANS.**

Explanation: This is a warning message. No terminals are defined with Fast Path buffers. Therefore, no terminals are able to send messages to a message-driven application program.

System Action: The operand was ignored.

Programmer Response: No action is required.

Severity: 2

G961 **FAST PATH POTENTIAL TRANSACT(S) REQUIRE AT LEAST ONE FAST PATH MESSAGE DRIVEN APPLCTN.**

Explanation: This is a warning message. All Fast Path potential transactions require at least one Fast Path application program defined to handle any input from terminals.

System Action: The operand is ignored.

Programmer Response: Add at least one Fast Path application program to the definition, or remove all Fast Path potential TRANSACT macro specifications.

Severity: 2

G962 **FPCTRL MACRO MUST BE CODED WHEN**

- FAST PATH MESSAGE DRIVEN APPLCTN(S) ARE DEFINED.
- FAST PATH NON-MSG DRIVEN APPLCTN(S) ARE DEFINED.
- FAST PATH POTENTIAL TRANSACT(S) ARE DEFINED.

Explanation: The FPCTRL macro was not coded and Fast Path resources were defined. One or more of the above messages will be printed to indicate which Fast Path resources were defined.

System Action: The operand was ignored.

Programmer Response: Code a FPCTRL macro.

Severity: 2

G963 **NO RTCODE(S) SPECIFIED FOR THIS APPLCTN.**

Explanation: This is a warning message. No RTCODE macros were coded following the identified APPLCTN statement.

System Action: The operand was ignored.

Programmer Response: Code at least one TRANSACT macro to process the Fast Path application.

Severity: 2

G964 **THIS LOCAL SYSID WAS SPECIFIED AS A REMOTE SYSID IN AN MSNAME STATEMENT.**

Explanation: The SYSID specified as a local SYSID in this APPLCTN statement was specified as a remote SYSID in an MSNAME STATEMENT. It cannot be both.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G965 **NO FAST PATH APPLCTN SPECIFICATIONS.**

Explanation: This is a warning message. The FPCTRL macro was coded but no Fast Path application programs were specified.

System Action: The operand was ignored.

Programmer Response: Remove the FPCTRL macro specification, or define at least one Fast Path application program.

Severity: 2

G966 **NO VALID VTAM SUBPOOL DEFINED FOR LUTYPE6 NODE WITH MULTIPLE SESSIONS**

Explanation: No valid VTAM LTERM SUBPOOL definition was contained in the IMS System Definition, although an LUTYPE6 TERMINAL statement specified subpool LTERM allocation.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G968 **MSGDEL SPECIFICATIONS WILL NOT ALLOW ANY DEFINED SUBPOOL TO BE ALLOCATED TO A SESSION FOR THIS NODE**

Or for LGEN

A TERMINAL STATEMENT SPECIFIED MSGDEL=value, BUT NO VTAM SUBPOOL HAS A MATCHING SPECIFICATION.

Explanation: The first message is issued for a standard system definition and the second message is issued for a LGEN system definition.

One of the following occurred:

- The TERMINAL statement specified MSGDEL=NONIOPCB, but no VTAM SUBPOOL statement was recognized with MSGDEL=NONIOPCB.
- The TERMINAL statement specified MSGDEL=NOTERM, but no VTAM SUBPOOL statement was recognized with MSGDEL= NONIOPCB.

System Action: Stage 1 does not complete successfully.

Programmer Response: Correct the specification and rerun Stage 1.

Severity: 4

G969 SECONDARY MASTER HARDCOPY LOGGING SPECIFIED BUT NO SECONDARY MASTER DEFINED.

Explanation: Although the COMM macro COPYLOG keyword specification indicated hardcopy logging on the secondary master terminal, no valid specification was found in the system definition Stage 1 input.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G970 VTAM APPLID FROM COMM MACRO STATEMENT IS ALSO DEFINED AS AN LTERM NAME

Explanation: The COMM macro statement specified the APPLID as a name which is also used on a NAME macro statement as a logical terminal name.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G971 IMSGEN MACRO GENERAL COMMUNICATIONS OPTIONS IGNORED; COMM MACRO SPECIFICATIONS USED

Explanation: The IMSGEN macro statement specified one or more of the general communications options, and the COMM macro statement was present in the Stage 1 input stream. The COMM macro specifications and defaults for these options will be used; those from the IMSGEN macro statement will be ignored.

System Action: The operand was ignored.

Programmer Response: No action is needed.

Severity: 2

G972 SECURITY OPTIONS SPECIFIED ON MORE THAN ONE MACRO; THOSE FROM THE [COMM|SECURITY] STATEMENT WILL BE USED.

Explanation: Specifications relating to either the password, the terminal security, the SECCNT, or all, which can be made on the IMSGEN, COMM, or SECURITY macro statement, were present on two or more of these macro statements. The specifications and defaults from the macro specified in the MNOTE will be used; those from the other macro statements will be ignored.

System Action: The operand was ignored.

Programmer Response: No action is needed.

Severity: 2

G973 SURVEY OPERAND IS INVALID; DEFAULT ASSUMED.

Explanation: This is a warning message. The operand was not specified as YES or NO. More than one parameter was specified.

System Action: The default value of SURVEY=NO is used.

Programmer Response: No action is needed.

Severity: 2

G974 THE FOLLOWING ARE DUPLICATE DBD NAMES:

Explanation: The DBD name was specified on multiple DATABASE macro statements.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G975 THE FOLLOWING ARE DUPLICATE PSB NAMES:

Explanation: The PSB name was specified on multiple APPLCTN macro statements.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G976 THE FOLLOWING ARE DUPLICATE TRANSACTION CODES:

Explanation: The transaction code name was specified on multiple TRANSACT macro statements.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G977 THE FOLLOWING ARE DUPLICATE MSNAME LINKNAMES:

Explanation: The link name was specified on multiple MSNAME macro statements.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G978 THE FOLLOWING ARE DUPLICATE VTAM NODE NAMES:

Explanation: The VTAM node name was specified on multiple TERMINAL macro statements.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G979 THE FOLLOWING ARE DUPLICATE LTERM NAMES:

Explanation: The logical terminal name was specified on multiple NAME macro statements.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G980 THE FOLLOWING ARE DUPLICATE ROUTING CODES:

Explanation: The routing code was specified on multiple RTCODE macro statements.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G981 THE FOLLOWING ARE DUPLICATE SUBPOOL NAMES:

Explanation: The SUBPOOL name was specified on multiple SUBPOOL macro statements.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G982 THE FOLLOWING ARE DUPLICATE PARTNER IDS:

Explanation: The PARTNER ID was specified on multiple MSLINK macro statements.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G983 THE FOLLOWING ARE DUPLICATE PHYSICAL LINKNAMES:

Explanation: The physical link name was specified on multiple MSPLINK macro statements.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G984 THE FOLLOWING ARE DUPLICATE REMOTE SYSTEM VTAM NODE NAMES:

Explanation: The remote system VTAM node name was specified on multiple MSPLINK macro statements.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G985 CROSS-CHECK FAILED FOR THE FOLLOWING RESOURCE NAMES:

Explanation: One of the following occurred:

- The transaction code was also specified as an LTERM.
- The MSNAME link name was also specified as an LTERM.
- The MSNAME link name was also specified as a transaction code.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G986 THE FOLLOWING ARE DUPLICATE BTAM XXXXXXXX ADDRESSES:

Explanation: The field xxxxxxxx can be one of the following: LINE, CTLUNIT, STATION, TERMINAL. List is the duplicate addresses that were detected.

LINE

- The address specified on the ADDR operand of the LINE macro is a duplicate of one specified on a previous LINE or MSPLINK statement.

CTLUNIT

- The address specified on the ADDR operand of a CTLUNIT macro has been previously specified for a control unit on this line.

  OR

- Within a 2260 or 3275 remote BTAM line group, a 2265 or 3275 BTAM terminal ADDR keyword operand specification of the 2265 or 3275 control unit address has been specified previously as a 2260, 2980, 3277 BTAM, 3286 BTAM, or 3275 BTAM control unit address.

STATION

- The address specified on the ADDR operand of a STATION macro is a duplicate of one specified on a previous STATION statement on this line.

TERMINAL

- Independent of terminal type, all input terminal addresses for a line must be unique.

System Action: The stage one assembly will not complete normally.

Programmer Response: Correct the duplicate specification and rerun.

Severity: 4

G987 MFSDFMT KEYWORD PARAMETER IS INVALID

Explanation: The MFSDFMT keyword does not contain YES or NO, or has more that one parameter.

System Action: Stage 1 does not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G988 NO TRANSACT MACROS CODED. AT LEAST ONE TRANSACT MACRO MUST BE INCLUDED WHEN AN APPLCTN MACRO IS INCLUDED.

Explanation: An APPLCTN macro was defined in Stage 1 without a corresponding TRANSACT macro.

System Action: The Stage 1 assembly will not complete normally.

Programmer Response: Add at least one TRANSACT macro to the definition.

Severity: 4

G989 DATABASE SPECIFICATIONS ARE REQUIRED FOR DBCTL, NONE SPECIFIED.

Explanation: No DATABASE statements were provided in the input to the IMS system definition for a DBCTL generation.

System Action: Stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G992 THE FESEXIT KEYWORD COMM MACRO IS MISSING OR INVALID

Explanation: FESEXIT=YES is expected, but FESEXIT=NO was specified in the COMM macro.

System Action: Stage 1 will not complete successfully.

Programmer Response: To activate Front End Switch (FES), specify both OPTION=FES in the TERMINAL macro and FESEXIT=YES in the COMM macro. To deactivate FES either eliminate OPTION= and FESEXIT= statements completely, or specify OPTION=NOFES and FESEXIT=NO. (OPTION=NOFES and FESEXIT=NO are the default.)

Severity: 4

G999 GENERATION TERMINATED; NOGO SET.

Explanation: One or more errors have occurred. Stage 1 is terminated; no Stage 2 JCL or control statements are produced.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G1000 RTCODE SPECIFICATION CANNOT PRECEDE APPLCTN.

Explanation: The RTCODE statement must be used in conjunction with a preceding APPLCTN statement.

System Action: Validation continues with the remaining operands as though the RTCODE statement

followed the first APPLCTN statement. Message G1002 can also appear.

Programmer Response: Insert the RTCODE statement following the correct APPLCTN statement.

G1002 RTCODE MUST FOLLOW FAST PATH MSG-DRIVEN APPLCTN SPEC.

Explanation: The RTCODE specification is only valid for Fast Path message-driven application programs. RTCODE specifications are used to route transactions to the correct application program. Non-message-driven programs cannot retrieve input messages and process them.

System Action: Parameter validation continues as though the previous APPLCTN statement defined a Fast Path application program.

Programmer Response: Remove the RTCODE statement or move it to follow the correct APPLCTN statement.

G1003 CODE OPERAND CONTAINS DUPLICATE ENTRY. SPECIFIED RTCODE—code

Explanation: A specified routing code name was previously specified as a routing code name.

System Action: The duplicate routing code is ignored.

Programmer Response: Eliminate the duplicate routing code by removing it or changing its name.

G1004 CODE OPERAND IS OMITTED OR INVALID.

Explanation: One of the following occurred:

- The CODE operand was not specified.
- The parameter contained a null subparameter.
- The parameter or subparameter was not specified as a 1-8 character alphanumeric name.
- The value begins with the string 'DFS' or 'DBCDM', or it contains a reserved word.

System Action: Any routing code names following the invalid one, when specified as a subparameter, are not validity checked. They are skipped. Stage 1 will not complete successfully.

Programmer Response: Specify the CODE parameter or correct its specification and rerun stage 1.

Severity: 4

G1005 INQ/INQUIRY OPERAND IS INVALID.

Explanation: One of the following occurred:

- More than one parameter was specified.
- The parameter specified was not YES or NO.
- Both INQ and INQUIRY parameters were specified.

Programmer Response: Correct the specification to either INQ=YES or INQ=NO.
FPCTRL

G1010 OTHREAD OPERAND IS INVALID.

Explanation: One of the following occurred:

- More than one parameter was specified.
- The parameter was not numeric.
- The first parameter was specified, but not as a decimal value from 1 to 31.

System Action: Validation continues with the BFALLOC and INREXIT parameters.

Programmer Response: Correct the specification and rerun Stage 1. Any valid number can be specified at system definition time. This parameter can be specified at system initialization time.

G1011 BFALLOC OPERAND IS INVALID.

Explanation: One of the following occurred:

- More than three subparameters were specified.
- The parameters that were specified were not numeric.
- Subparameters 1 and 2 were not in the range of through 999.
- Subparameter 3 is not 512, 1024, 2048, or 4096.

System Action: The subparameter checking is done from left to right. The first error causes the error message to be issued, and the subparameters to the right of the error are not validated. Validation continues with the INREXIT parameter.

Programmer Response: Correct the specification and rerun Stage 1. This parameter can be removed and specified at system initialization time.

G1012 INREXIT OPERAND IS INVALID.

Explanation: One of the following occurred:

- Only one parameter is valid, and more than one was specified.
- The specified parameter did not start with an alphabetic character, or it was longer than 8 characters.

Programmer Response: Correct the specification and rerun Stage 1.

G1016 FAST PATH NOT SUPPORTED ON VS/1.

Explanation: Fast Path can only be specified if the IMSTRL macro indicates that the host system is z/OS.

System Action: Stage one will not complete normally.

Severity: 4
IMSCTRL

The IMSCTRL macro also issues messages G000 through G014.

G1200 HSB KEYWORD INVALID FOR DBCTL

Explanation: The HSB keyword cannot be specified for a DBCTL class system definition. The HSB keyword is ignored.

System Action: The stage 1 will complete successfully.

Programmer Response: No action is required.

Severity: 2

G1201 WARNING: CMDCHAR INCORRECT.

Explanation: One of the following occurred:

- More than one parameter was specified
- Operand is not one character.

System Action: The stage 1 does not complete successfully.

Severity: 4

G1205 RSR FEATURE '*feature*' NOT AVAILABLE

Explanation: Either the Remote Site Recovery feature RLT or DLT is not available. The RLT feature must be available if the DLT feature is specified.

System Action: Stage one does not complete normally.

System Programmer Response: Ensure the needed RSR feature is available and rerun the stage one assembly.

Severity: 4

G1206 THE MCS SUBPARAMETER IS OUTSIDE THE RANGE OF ACCEPTABLE VALUES. DEFAULT OF (2,7) ASSUMED.

Explanation: This is a warning message. One or more of the following occurred:

- More than 16 values were specified for the MSC routing code. Extra values are ignored.
- An MCS routing code value was outside the acceptable range of 1 through 16.

System Action: The subparameter is ignored or the default value is used.

Programmer Response: No action required.

System Operator Response: No operator action is required.

Severity: 2

G1207 THE DESC SUBPARAMETER IS OUTSIDE THE RANGE OF ACCEPTABLE VALUES. DEFAULT OF (7) IS ASSUMED.

Explanation: This is a warning message. One or more of the following occurred:

- More than 16 values were specified for the DESC code. Extra values are ignored.
- A DESC code value was outside the range of 1 through 16.

System Action: The subparameter is ignored or the default value is used.

Programmer Response: No action required.

System Operator Response: No operator action is required.

Severity: 2

G1208 TYPE/CLASS OF ALL,DCCTL SPECIFIED; TYPE/CLASS OF ON-LINE,DCCTL USED.

Explanation: This is an informational message indicating the second subparameter of the SYSTEM keyword in the IMSCTRL macro was changed.

Severity: 2

G1209 ETOFEAT= sub parameters 1 and/or 2 have been specified. These sub parameters are no longer valid and are ignored.

Explanation: This is an informational message to indicate that subparameters 1, 2, or both, of the ETOFEAT= keyword in the IMSCTRL macro are invalid.

System Action: The subparameters are ignored.

Programmer Response: No action is required.

Severity: 2

G1210 ETO DESCRIPTORS REQUESTED, BUT INVALID SYSGEN CLASS OR TYPE.

Explanation: ETOFEAT=(,,ALL) or ETOFEAT=(,,ONLY) specified. Descriptors were requested, but invalid system definition class or type was specified.

System Action: The request to produce ETO descriptors is ignored.

Programmer Response: No action is required unless a system with the ETO feature is to be built.

Severity: 2

G1211 ETO DESCRIPTORS ARE NOT BUILT IN A LGEN SYSGEN.

Explanation: ETO descriptors are not built in a LGEN system definition.

- A severity 2 warning message is issued when ETO descriptors are requested along with the system definition, that is, ETOFEAT=(,,ALL).
- A severity 4 error message is issued when only ETO descriptors are requested in a LGEN system definition, that is, ETOFEAT=(,,ONLY)

System Action: For the warning message, processing continues. For the error message, the stage 1 will not complete successfully.

Programmer Response: Change the ETOFEAT keyword of the IMSCTRL macro to not request the building of the ETO descriptors.

Severity: 2 or 4
DCTENTRY

G1212 RSR FEATURE 'DLT' CAN NOT BE SPECIFIED WITH A DCCTL TYPE SYSGEN

Explanation: The DLT feature of RSR is not valid with a DCCTL type system definition.

System Action: The RLT feature value is substituted and the stage 1 completes successfully.

Programmer Response: No action is required.

Severity: 2

G1300 TYPE OPERAND IS OMITTED.

Explanation: The TYPE operand must be specified.

System Action: The stage 1 does not complete successfully.

Programmer Response: Provide the TYPE operand on the DCTENTRY macro call.

Severity: 4

G1301 THE FOLLOWING OPERANDS ARE INVALID: list

Explanation: The list can include one or more of the following: FEAT, SIZE, or TYPE. Each operand indicates that one of the following errors occurred:

FEAT

An operand was specified more than once.

Mutually exclusive operands were specified.

IGNORE was specified with other operands.

SIZE

There are not exactly two parameters.

The first value is not a number in the range 1-16384.

The second value is not a number in the range 2-16384.

The product of the two values is not a number in the range 80-16384.

TYPE

The parameter was not in the format '3270-Ann' where 'nn' is a 1-digit number from 1 to 9, inclusive, or a 2-digit number from 01 to 15, inclusive.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G1302 TYPE / SIZE PARAMETER COMBINATION IS INVALID.

Explanation: One of the following occurred:

- No valid screen size is declared for this symbolic name.
- No symbolic name is specified for this screen size.
- The screen size declared is not the same as that previously declared for the same symbolic name.

System Action: The stage 1 will not complete successfully.

Programmer Response: Correct the specification and rerun stage 1.

Severity: 4

G1303 WARNING: SIZE OPERAND FOR DISPLAY EXCEEDS 255 AND MAY BE INCONSISTENT WITH VTAM REQUIREMENTS.

Explanation: The size operand for display exceeds 255 and might be inconsistent with VTAM requirements.

System Action: The stage 1 continues normal processing.

Severity: 2
SPECIAL CATEGORY

G9000 THE xxxxxxxx MACRO IS INVALID FOR A DBCTL GEN

Explanation: The Database Control Subsystem (DBCTL) does not support macro xxxxxxxx specified in the DBCTL Stage 1 system definition.

System Action: Processing continues.

Programmer Response: Delete the identified macro from the DBCTL Stage 1 system definition.

Severity: 2

G9001 **INVALID PARAMETER - xxxxxxxx - SPECIFIED IN xxxxxxxx MACRO.**

Explanation: One or more parameters in the statement being processed contains a syntax error.

System Action: The invalid parameters are ignored and the defaults are used.

Programmer Response: Remove or correct the invalid parameters and rerun Stage 1 of IMS system definition.

Severity: 4

G9002 **xxxxxxxx OPERAND IS IGNORED FOR DBCTL GEN**

Explanation: Operand xxxxxxxx is not supported for DBALL/DBCTL. This message is issued for each invalid operand within a macro.

System Action: Operand is ignored.

Programmer Response: Operand can be removed from the DBCTL Stage 1 system definition.

Severity: 2

Chapter 17. Program Specification Block Generation (PSBGEN) Messages

This section lists the conditions that can cause PSB generation (PSBGEN) errors and the messages displayed for those conditions.

The PSBGEN messages in this section are arranged in an alphanumeric manner.

Because PSB generation is composed of operating system assembler language macro instructions, the omission of or an invalid sequence in IMS PSB statements or invalid keyword parameters also result in error statements from the operating system assembler program.

In addition to the system action specified in this section for each of these messages, the following action is also taken (except where explicitly noted otherwise): the remaining PSBGEN statements are checked for validity, and the PSB generation is terminated prior to macro expansion.

PCB100 PCB SPECIFICATION LIMIT EXCEEDED

Explanation: The limit of 256 PCB statements has been exceeded.

System Action: This PCB statement is used, and the prior PCB values are overlaid.

Programmer Response: Reduce the number of PCB statements to be less, and rerun PSBGEN.

PCB110 TYPE OPERAND IS OMITTED OR INVALID

Explanation: The TYPE operand in a PCB macro was omitted or had a value other than "TP" or "DB".

System Action: No default is taken.

Programmer Response: Correct the TYPE operand, and rerun PSBGEN.

PCB120 LTERM, DBDNAME, OR NAME OPERAND IS INVALID

Explanation: One of the values entered for the LTERM, DBDNAME, or NAME operand on a PCB macro statement exceeds 8 characters.

System Action: The name is used for checking validity of following operands.

Programmer Response: Correct the error, and rerun PSBGEN.

PCB130 NAME, LTERM, AND DBDNAME OPERANDS ARE MUTUALLY EXCLUSIVE, ONLY ONE MAY BE ENTERED

Explanation: NAME, LTERM, and DBDNAME all have the same logical meaning for any one PCB statement.

System Action: In a TP PCB, LTERM is the default. In a DB PCB, the DBDNAME is used.

Programmer Response: Correct the error, and rerun PSBGEN.

PCB140 LTERM OR NAME OPERAND IS OMITTED

Explanation: The destination name has been omitted for a PCB with TYPE=TP.

System Action: No default is given.

Programmer Response: Define an LTERM or NAME operand, and rerun PSBGEN.

PCB150 INVALID OPERANDS ARE SPECIFIED FOR A TP OR GSAM PCB

Explanation: One or more of the following values were entered for a PCB with TYPE=TP: PROCOPT=, KEYLEN=, FB=, POS=, DBDNAME=.

One or more of the following values were entered for a PCB with TYPE=GSAM: LTERM=, POS=, EXPRESS=, MODIFY=, PROCSEQ=, FB=.

System Action: Nothing else is processed on that PCB statement.

Programmer Response: Correct the errors, and rerun PSBGEN.

PCB160 TP PCBS MUST BE SPECIFIED BEFORE DB OR GSAM PCBS

Explanation: All PCB macros with TYPE=TP must precede PCB macros with TYPE=DB in the PSBGEN assembly.

System Action: Nothing else is processed on that PCB statement.

Programmer Response: Correct the errors, and rerun PSBGEN.

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PCB170 DBDNAME OR NAME OPERAND IS OMITTED

Explanation: The database name has not been specified for a PCB with TYPE=DB.

System Action: The rest of the PCB parameters are scanned for validity.

Programmer Response: Correct the error, and rerun PSBGEN.

PCB180 PROCOPT OPERAND IS INVALID

Explanation: The value specified in the PROCOPT operand in a PCB macro TYPE=DB is invalid.

System Action: No default is taken.

Programmer Response: Correct the PROCOPT operand, and rerun PSBGEN.

PCB190 KEYLEN OPERAND IS OMITTED OR INVALID

Explanation: The KEYLEN operand has been omitted, is not a numeric value, or is greater than 32 767.

System Action: If the KEYLEN number exceeds 32 767, the invalid number is used for subsequent calculations.

Programmer Response: Correct the KEYLEN operand, and rerun PSBGEN.

PCB210 POS OPERAND IS INVALID

Explanation: The POS operand specified on a PCB TYPE=DB macro is invalid. Acceptable values are S, SINGLE, M, and MULTIPLE.

System Action: The operand is ignored.

Programmer Response: Correct the POS operand, and rerun PSBGEN.

PCB220 LTERM OPERAND IS INVALID FOR DB PCBS

Explanation: The LTERM operand cannot be specified for a PCB with TYPE=DB.

System Action: The operand is ignored.

Programmer Response: Correct the error, and rerun PSBGEN.

PCB230 NAME OR DBDNAME OPERAND MUST BE ALPHA

Explanation: The entered database name value must begin with an alphabetic character for DB PCBs.

System Action: The operand is ignored if invalid.

Programmer Response: Correct the error, and rerun PSBGEN.

PCB240 MODIFY OPERAND IS INVALID

Explanation: The MODIFY operand was specified on a PCB macro and either the TYPE=TP operand was not specified or the NAME or LTERM operand was also specified.

System Action: The MODIFY operand is ignored.

Programmer Response: Correct the MODIFY operand, and rerun PSBGEN.

PCB250 EXPRESS OPERAND IS INVALID

Explanation: You specified an invalid operand. The valid operands are EXPRESS=YES or EXPRESS=NO.

System Action: No default is taken.

Programmer Response: Correct the error, and rerun PSBGEN.

PCB260 PROCSEQ OPERAND IS INVALID

Explanation: The PROCSEQ operand on a PCB TYPE=DB macro statement is invalid because it contains more than 8 characters.

System Action: The PROCSEQ operand is ignored.

Programmer Response: Correct the PROCSEQ operand, and rerun PSBGEN.

PCB270 PROCOPT SPECIFICATION IS INVALID

Explanation: PROCOPT=L or PROCOPT=LS was specified along with a PROCSEQ specification.

System Action: Both values are used in evaluating the remaining statements.

Programmer Response: Correct the error, and rerun PSBGEN.

PCB280 DB PCBs MUST BE SPECIFIED BEFORE GSAM PCBs.

Explanation: GSAM PCBs must be specified after TP PCBs or DB PCBs if there are any.

System Action: PSBGEN is terminated because of the specification error.

Programmer Response: Correct the error, and resubmit the job.

PCB300 ALTRESP OPERAND IS INVALID

Explanation: You specified an invalid operand. The valid operands are ALTRESP=YES or ALTRESP=NO.

System Action: No default is taken.

Programmer Response: Correct the error, and rerun PSBGEN.

PCB310 SAMETRM OPERAND IS INVALID

Explanation: You specified an invalid operand. The valid operands are SAMETRM=YES or SAMETRM=NO.

System Action: No default is taken.

Programmer Response: Correct the error, and rerun PSBGEN.

PCB350 PCBNAME/LABEL xxxxxxxx IS NOT UNIQUE. PCB NUMBER yy ALREADY USES zzzzzzzz

Explanation: A PCBNAME or LABEL was used to name the PCB xxxxxxxx, but PCB number yy has been named zzzzzzzz.

System Action: Processing terminates with return code 8.

Programmer Response: Correct the PCB names.

Problem Determination: 2, 3, 8 and 19.

PCB352 PCBNAME/LABEL xxxxxxxx IS TOO LONG. MAXIMUM LENGTH IS 8 CHARACTERS

Explanation: A PCBNAME or LABEL was used to name the PCB xxxxxxxx, but the name is longer than the 8-character maximum.

System Action: Processing terminates with RC=8.

Programmer Response: Correct the length of the PCB name.

Problem Determination: 2, 3, 8 and 19.

PCB355 PCBNAME/LABEL xxxxxxxx BEGINS WITH THE PREFIX 'DFS' WHICH IS RESERVED FOR IMS.

Explanation: A PCBNAME or LABEL was used to name the PCB xxxxxxxx, but the name began with 'DFS', which is reserved for use by IMS.

System Action: Processing terminates with RC=8.

Programmer Response: Correct the PCB name.

Problem Determination: 2, 3, 8 and 19.

PCB360 SB CAN ONLY BE SPECIFIED WITH TYPE=DB

Explanation: TYPE=DB is not specified on the PCB macro along with the SB parameter. If the SB parameter is specified, then TYPE=DB must also be specified.

System Action: IMS terminates the PSBGEN.

User Response: Specify either TYPE=DB or remove the SB parameter from the PCB macro; then rerun the PSBGEN.

PCB365 PCBNAME AND LABEL ARE CONFLICTING

Explanation: A PCBNAME and LABEL were used, but only one can be used to name a PCB.

System Action: Processing terminates with RC=8.

Programmer Response: Correct the PCBNAME/LABEL.

Problem Determination: 2, 3, 8 and 19.

PCB370 LIST= xxx IS INVALID -- YES/NO REQUIRED

Explanation: LIST=xxx was specified on the PCB and is invalid. Only YES or NO are recognized.

System Action: Processing terminates with RC=8.

Programmer Response: Correct the LIST= parameter on the PCB.

Problem Determination: 2, 3, 8 and 19.

PCB375 LIST=NO IS INVALID FOR PCB WITHOUT NAME

Explanation: LIST=NO is specified for the PCB, but a PCBNAME/LABEL was not used. LIST=NO requires a name for the PCB.

System Action: Processing terminates with RC=8.

Programmer Response: Correct the PCB definition.

Problem Determination: 2, 3, 8 and 19.

PCB400 INVALID SB PARAMETER xxxxxxxx

Explanation: The SB parameter value xxxxxxx is invalid. The only valid SB parameter values are COND and NO.

System Action: IMS terminates the PSBGEN.

User Response: Correct the error by ensuring that the parameter value is either COND or NO; then rerun the PSBGEN.

PCB410 TOO MANY SB PARAMETERS

Explanation: There are more than 3 subparameters specified for the SB parameter.

System Action: IMS terminates the PSBGEN.

User Response: Correct the error by ensuring that no more than 3 subparameters are specified for the SB parameter; then rerun the PSBGEN.

PCB420 VIEW parameter is invalid

Explanation: The VIEW parameter is invalid. The correct value is MSDB.

System Action: The PSBGEN terminates.

System Programmer Response: Correct the VIEW parameter and re-run the PSBGEN.

PGENnnn Messages

PGEN100 PSBNAME OPERAND IS OMITTED OR INVALID

Explanation: The PSBNAME operand is omitted or is invalid because it is greater than 8 characters in length or contains a special character.

System Action: Terminate PSBGEN after processing the other parameters.

Programmer Response: Correct the errors, and rerun PSBGEN.

PGEN110 LANG OPERAND IS OMITTED OR INVALID

Explanation: The LANG operand was omitted or did not contain the value COBOL, PL/I, ASSEM, PLI, or PL1.

System Action: Terminate PSBGEN after processing the other parameters on this statement.

Programmer Response: Correct the errors, and rerun PSBGEN.

PGEN120 PSBGEN TERMINATED; ERRORS IN PSB

Explanation: A level 8 MNOTE was encountered in PSBGEN or some previous expansion of another PSB statement.

System Action: Terminate processing.

Programmer Response: Correct the errors, and rerun PSBGEN.

PGEN130 PCBn HAS NO SENSITIVE SEGMENTS

Explanation: A PCB has no SENSEG statements following it.

System Action: This is a warning message. Processing continues.

PGEN140 INTERNAL PSBGEN ERROR, PSB NOT USABLE, SUBMIT APAR

Explanation: An error occurred during source segment table generation.

System Action: The PSBGEN assembly is terminated.

Problem Determination: 19, 35

PGEN150 SSASIZE OPERAND IS INVALID

Explanation: The SSASIZE operand must specify a decimal value from 0 to 256000.

System Action: Terminate PSBGEN after processing the other parameters on this statement.

Programmer Response: Correct the SSASIZE operand, and rerun PSBGEN.

PGEN160 IOASIZE OPERAND IS INVALID

Explanation: The IOASIZE operand must specify a decimal value from 0 to 256000.

System Action: Terminate PSBGEN after processing the other parameters on this statement.

Programmer Response: Correct the IOASIZE operand, and rerun PSBGEN.

PGEN170 MAXQ OPERAND IS INVALID

Explanation: You have specified a MAXQ operand that is nonnumeric, exceeds 32767, or contains more than one value. See the PSBGEN statements in *IMS Version 9: Utilities Reference: System* for valid operands.

System Action: No default is taken.

Programmer Response: Correct the error, and rerun PSBGEN.

PGEN180 CMPAT OPERAND IS INVALID

Explanation: You specified an invalid operand. The valid operands are CMPAT=YES or CMPAT=NO.

System Action: No default is taken.

Programmer Response: Correct the error, and rerun PSBGEN.

PGEN200 EITHER OLIC=YES OR OLIC=NO MUST BE SPECIFIED

Explanation: An invalid operand value has been specified. The valid operand value to specify is either OLIC=YES or OLIC=NO.

System Action: The PSBGEN assembly is terminated.

Programmer Response: Correct the error, and rerun PSBGEN.

PGEN210 OLIC=YES IS INVALID IF ANY PCB SPECIFIES PROCOPT=L/LS

Explanation: A DL/I database PSB with a PROCOPT=L/LS has been specified. This is invalid in combination with OLIC=YES.

System Action: The PSBGEN assembly is terminated.

Programmer Response: Correct the error, and rerun PSBGEN.

PGEN220 OLIC=YES REQUIRES AT LEAST ONE DATA BASE PCB BE SPECIFIED

Explanation: OLIC=YES has been specified, but there were no DL/I database PCBs in this PSBGEN.

System Action: The PSBGEN assembly is terminated.

Programmer Response: Correct the error, and rerun the PSBGEN.

PGEN230 LOCKMAX MUST BE NUMERIC VALUE BETWEEN 0 AND 255

Explanation: The PSBGEN detected a LOCKMAX specification that is either non-numeric or not between 0 and 255.

System Action: The PSBGEN assembly terminates.

Programmer Response: Correct the LOCKMAX specification and rerun the PSBGEN.

PGEN500 INVALID POSITIONAL OPERAND—operand— SPECIFIED ON THIS STATEMENT

Explanation: One or more positional operands were specified, which are undefined in the syntax of the statement type being processed.

System Action: The invalid positional operands are ignored.

Programmer Response: Remove the positional operands, and rerun PSBGEN.

SEGnnn Messages

SEG100 SENSEG SPECIFICATION LIMIT EXCEEDED

Explanation: The limit of 3000 SENSEG statements has been reached.

System Action: The first 999 SENSEG statements and the last are used. Each one after 999 is checked for validity and then overlaid by the next SENSEG statement.

Programmer Response: Remove excess SENSEG statements, and rerun PSBGEN.

SEG110 PCB STMT MUST PRECEDE SENSEG STMT

Explanation: A PCB statement must precede a SENSEG statement.

System Action: The previous PCB statement is used.

Programmer Response: Correct the error, and rerun PSBGEN.

SEG120 NAME PARAMETER IS OMITTED Extra

Explanation: Either the NAME parameter has been omitted from the SENSEG statement or the value specified is not from 1 to 8 alphanumeric characters.

System Action: If NAME is omitted, no name is used. If specified and exceeds 8 characters, the first 8 characters are used.

Programmer Response: Correct the NAME parameter, and rerun PSBGEN.

SEG130 PARENT PARAMETER IS OMITTED OR INVALID

Explanation: Either the PARENT parameter has been omitted from the SENSEG statement or the value specified is not zero or 1 to 8 alphanumeric characters.

System Action: No parent name is given in case of omission. The first 8 characters are used if the parameter exceeds 8 characters.

Programmer Response: Correct the PARENT parameter, and rerun PSBGEN.

SEG140 SENSEG STMT IS INVALID FOR TP OR GSAM PCBs

Explanation: A PCB with TYPE=TP has been followed by a SENSEG statement without an intervening PCB with TYPE=DB.

System Action: The specified SENSEG is not processed.

Programmer Response: Correct the error, and rerun PSBGEN.

SEG150 DUPLICATE SENSEG NAME IN PCB

Explanation: The name specified in the NAME operand on this SENSEG statement has previously been specified on another SENSEG statement for this PCB.

Programmer Response: Correct the SENSEG name, and rerun PSBGEN.

SEG160 SENSEG PARENT NOT DEFINED

Explanation: The named parent value has not been previously defined as a sensitive segment.

System Action: Validity checking on that SENSEG statement is terminated.

Programmer Response: Correct the error, and rerun PSBGEN.

SEG170 POSITIONAL/KEYWORD OPERAND MIX IS INVALID

Explanation: Positional operands were specified on the same SENSEG statement with IMS keywords. One or the other must be used.

System Action: This SENSEG statement is not processed.

Programmer Response: Correct the SENSEG statement, and rerun PSBGEN.

SEG180 NAME OPERAND IS OMITTED OR INVALID

Explanation: Either the NAME operand has been omitted from the SENSEG statement or the specified name is not from 1 to 8 alphanumeric characters.

System Action: If it is omitted, no name is used. The first 8 characters are used, if specified and the operand exceeds 8 characters.

Programmer Response: Specify or correct the NAME operand, and rerun PSBGEN.

SEG190 PARENT OPERAND IS OMITTED OR INVALID

Explanation: Either the PARENT operand has been omitted from the SENSEG statement or the value specified is not zero or 1 to 8 alphanumeric characters.

System Action: No parent name is given in case of omission. The first 8 characters are used if the operand exceeds 8 characters.

Programmer Response: Correct the PARENT operand, and rerun PSBGEN.

SEG230 PROCOPT OPERAND IS OMITTED OR INVALID

Explanation: This message is issued if you

- Omitted the PROCOPT parameter from the SENSEG statement.
- Specified an invalid processing option on the PROCOPT parameter.

System Action: The PSBGEN is terminated because of the specification error.

Programmer Response: Correct the PROCOPT operand; then rerun PSBGEN.

SEG250 MAXIMUM NUMBER OF INDICES PER SENSEG IS 32

Explanation: More than 32 secondary indexes were specified in the INDICES parameter for this SENSEG statement.

System Action: Processing on this SENSEG statement is stopped.

Programmer Response: Reduce the number of secondary indexes specified to less than or equal to 32, and rerun PSBGEN.

SEG260 INDICES OPERAND IS INVALID

Explanation: One or more of the secondary index names specified in the INDICES operand exceeded 8 characters.

System Action: Processing on this SENSEG is stopped.

Programmer Response: Correct the INDICES operand, and rerun PSBGEN.

SEG270 SECONDARY INDEX NAME IS A DUPLICATE

Explanation: One of the secondary index names specified for the INDICES operand on this SENSEG statement has been previously specified on another SENSEG statement for the PCB.

Programmer Response: Correct the INDICES operand, and rerun PSBGEN.

SEG280 SECONDARY INDICES LIMIT PER PSB EXCEEDED

Explanation: More than 1000 secondary indexes have been specified for this PSBGEN.

System Action: Processing on this SENSEG is terminated.

Programmer Response: Reduce the total number of secondary indexes to less than or equal to 1000, and rerun PSBGEN.

SEG290 INDICES OPERAND IS INVALID WITH PROCOPT=OPTION

Explanation: A PCB with PROCOPT=LS or L has been followed by a SENSEG statement with an INDICES operand.

System Action: Processing on this SENSEG is terminated.

Programmer Response: Remove the INDICES operand, and rerun PSBGEN.

SEG300 SUBSET POINTER IS NOT SUPPORTED

Explanation: The SSPTR operand is specified to the root segment.

System Action: The PSBGEN is terminated because of the specification error.

Programmer Response: Correct the SENSEG statement, and rerun PSBGEN.

SEG310 UPDATE NOT ALLOWED FOR SSPTR *subset_pointer_number*

Explanation: The update sensitivity specified for subset pointer *subset_pointer_number* cannot be used because the processing option is not A, R, I or D.

System Action: The PSBGEN is terminated.

Programmer Response: Take one of the following actions to correct the problem:

- Change the PCB or SENSEG PROCOPT to an update option.
- Change the sensitivity of the subset pointer to READ.

Module: DFSFLOAT

SFLDnnn Messages

SFLD100 PCB AND SENSEG STATEMENTS MUST PRECEDE SENFLD STATEMENT

Explanation: PCB and SENSEG statements must precede a SENFLD statement.

System Action: The specified SENFLD is not processed.

Programmer Response: Correct the error, and rerun PSBGEN.

SFLD110 SENSEG STATEMENT MUST PRECEDE SENFLD STATEMENT

Explanation: A SENSEG statement must precede a SENFLD statement.

System Action: The specified SENFLD is not processed.

Programmer Response: Correct the error, and rerun PSBGEN.

SFLD120 THE LIMIT OF 10 000 SENFLDS WITHIN A PSBGEN HAS BEEN EXCEEDED

Explanation: The limit of 10 000 SENFLDs has been exceeded.

System Action: This SENFLD statement is used, and the prior SENFLD values are overlaid.

Programmer Response: Reduce the number of SENFLD statements to 10 000 or less, and rerun PSBGEN.

SFLD130 THE LIMIT OF 255 SENFLDS WITHIN A SENSEG HAS BEEN EXCEEDED

Explanation: The limit of 255 SENFLDs within a SENSEG has been exceeded.

System Action: This SENFLD statement is used, and the prior SENFLD values are overlaid.

Programmer Response: Reduce the number of SENFLD statements to 255 or less, and rerun PSBGEN.

SFLD140 NAME PARAMETER IS OMITTED OR INVALID

Explanation: Either the NAME parameter has been omitted from the SENFLD statement or the value specified is not from 1 to 8 alphanumeric characters.

System Action: If the NAME parameter is omitted, no name is used. If specified and it exceeds 8 characters, the first 8 characters are used.

Programmer Response: Specify or correct the NAME parameter, and rerun PSBGEN.

SFLD160 START PARAMETER IS OMITTED OR INVALID

Explanation: Either the START parameter has been omitted from the SENFLD statement or the value specified is not a number from 1 to 32 767.

System Action: If the START parameter is omitted, 1 is used. If specified, the value specified is used.

Programmer Response: Specify or correct the START parameter, and rerun PSBGEN.

SFLD170 REPLACE PARAMETER IS INVALID

Explanation: The value specified is invalid. The valid operands are REPLACE=YES and REPLACE=NO.

System Action: REPLACE=NO is assumed.

Programmer Response: Correct the error, and rerun PSBGEN.

SFLD180 SENFLD STATEMENT NOT VALID WITH PROCOPT=K

Explanation: A SENSEG with PROCOPT=K has been followed by a SENFLD statement.

System Action: The SENFLD statement is processed.

Programmer Response: Correct the error, and rerun PSBGEN.

Appendix A. IMS Problem Determination

IMS messages and codes problem determination is accomplished by using procedures established by IBM for identifying a failing hardware unit or program and determining whether the user or IBM is responsible for resolution of a given problem.

Problem determination information is included, as appropriate, for all messages and codes. In most instances, one or more numbers (for example, "4,6") appear after the heading "Problem Determination" for a given message or code. These numbers are cross-references to the numbered items that appear in the following list of standard problem determination actions to be taken by the user.

1. Save the console sheet from the z/OS console.

2. Save the input associated with the job.

3. Save the SYSOUT (system output) associated with the job.

4. Save the storage dump at time of failure of the IMS control region, and save the dump of all associated message regions. (If SYS1.DUMP is used, it should be printed and saved.)

5. Save the IMS log printout.

6. Save the IMS master terminal printout.

7. Save the local/remote terminal printout.

8. Save the JCL listings.

9. Save the ACB generation output.

10. Save the IMSGEN listing.

11. Save the SYSABEND dump. (If SYS1.DUMP is used, it should be printed and saved.)

12. Save the assembly listing of any user-modified IMS modules.

13. Save the link-edit map.

14. Save the LOG trace.

15. Save the IMS log printout starting with the records that were written just before abnormal termination.

16. Save the output listing from the MFS Language Utility execution.

17. Collect the following problem-related data:

- **a.** System dump if running batch.
- **b.** If running online, print log records type X'67', sub-record type X'FF' (Pseudoabend). Use the File Select and Formatting Print program to print these records. The OPTION PRINT control statement must specify EXITR=DFSERA30.
- **c.** Run the DL/I test program (DFSDDLTO) with SNAP statements before and after the failing call.
- **d.** Save the PSB and DBD listings or statements, or both, related to the failure.
- **e.** A dump of log records type X'67'. Sub-record type X'FE' (program isolation trace). Use the File Select and Formatting print program to print the records. Program isolation trace must be enabled when the log is created. The OPTION PRINT control statement must specify EXITR=DFSERA40.
- **f.** If online, a snap from the log of the online region.
- **g.** A history of the database backout, recovery, and reorganization activity.

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18. Save the assembly listing for the associated DBDs.

19. Save the assembly listing for the associated PSBs.

20. Save a listing of the VSAM catalog entries for the associated data sets at the time of failure.

23. Contact IBM for hardware support.

24. Dump the 3270 diagnostic error log records off the IMS log. Record type X'67'. Sub-record type X'03'.

25. Submit a copy of the IMS log.

26. Determine the CCB involved from the SPACCB field of the scratch pad area or from the CTBCCBPT field. Determine the associated (a) source and output CNT, and (b) the line and PTERM (CTB).

Determine from log records 01, 02, 03, 07, 08, 11, 12 and 13 the status of the conversation:

a. The message was ready, but the application was not scheduled. A 01 destination is a conversational SMB.

b. The application was scheduled and a 08 record was produced.

c. The application inserted a segment to a conversational terminal. If the destination of the message is CNT, 03 and 13 records are produced.

d. The application inserted a segment to a conversational program. SPA is the first segment of a message in the 03 records.

e. The application finished normally or terminated abnormally. The 07 record contains the completion code of a conversational application. The DLRFLAG2 area (the last word of the 07 log record) contains synchronization point information.

f. A 12 record indicates that the conversation was terminated.

g. Determine if 02 records, produced for the following commands, affected the terminal in conversation: `/EX1`, `/HOLD`, `/REL`, or `/START LINE` (no PTERM).

h. Does restarting IMS affect the conversation? For details, see the input to and output logs from restart.

27. Save the z/OS hard-copy message log output.

28. Determine the status of z/OS and IRLM operating in the other system with which this system is connected during normal operations.

29. Save the IRLM address space dump generated at the time of the failure.

30. Save the dump of any IMS online or batch address space that failed near the time of the IRLM failure. Follow IMS problem determination procedures relative to the IMS dump. The IMS failure might be related to the IRLM failure.

31. Save a listing of the IRLM start procedure JCL.

32. Save a listing of the IMSGEN performed to install the IRLM.

33. Save listings of the VTAM definitions performed to install the IRLM.

34. Save the GTF trace output, if any is available showing activity at the time of the failure.

35. Refer to the following manuals for further assistance to resolve your problem:

- *IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis*
- *IMS Version 9: Diagnosis Guide and Reference*

Check all input for accuracy and analyze any dumps.

If you are still unable to solve your problem, contact the IBM Support Center for further assistance.

36 If you are unable to solve the problem, contact the IBM Support Center for assistance.

37 Submit a copy of the type X'02' log records.

38. Save the CCTL SNAP or SDUMP data set.

39. Save the output from the Security Maintenance utility.

40. Save a listing of the DBRC RECON.

41. Take an SVC dump and contact the IBM Support Center for further assistance.

Appendix B. Return Codes and Function Codes

In this section:

- "Buffer Handler Return Codes"
- "Return Codes and Function Codes"

Buffer Handler Return Codes

Table 128 contains the possible Buffer Handler return codes.

Table 128. Buffer Handler Return Codes

Symbolic Name	Instruction	Value or Equated Value	Comment
PSTRTCDE	**DC**	**1XL1'00'**	**STATUS OF CALL**
PSTCLOK	**EQU**	**X'00'**	**EVERYTHING SATISFACTORY**
PSTGTDS	**EQU**	**X'04'**	**RBN BEYOND DATA SET**
PSTRDERR	**EQU**	**X'08'**	**PERMANENT READ ERROR**
PSTNOSPC	**EQU**	**X'0C'**	**NO MORE SPACE IN DATA SET**
PSTBDCAL	**EQU**	**X'10'**	**ILLEGAL CALL**
PSTENDDA	**EQU**	**X'14'**	**END OF DATA SET ENCOUNTERED**
***NO RECORD RETURNED**			
PSTNOTFD	**EQU**	**X'18'**	**REQUESTED RECORD CANNOT BE FOUND**
PSTNWBLK	**EQU**	**X'1C'**	**NEW BLOCK CREATED IN BUFFER POOL**
PSTNPLSP	**EQU**	**X'20'**	**INSUFFICIENT SPACE IN POOL**
PSTTRMNT	**EQU**	**X'24'**	**USER MUST TERMINATE. NO SPACE IN POOL**
PSTDUPLR	**EQU**	**X'28'**	**LOGICAL RECORD ALREADY IN KSDS**
PSTWRERR	**EQU**	**X'2C'**	**PERMANENT WRITE ERROR**
PSTBUFIN	**EQU**	**X'30'**	**BUFFER INVALIDATED**
PSTBIDIN	**EQU**	**X'34'**	**UNABLE TO ACQUIRE BID/B**
PSTPDERR	**EQU**	**X'38'**	**UNABLE TO LOCATE DDIR/PDIR ENTRY**
PSTNOSTO	**EQU**	**X'3C'**	**STORAGE NOT AVAILABLE**

Return Codes and Function Codes

Table 129 on page 558 through Table 133 on page 568 indicate the possible combinations of return codes (RC) and function codes (FC) applicable to IMS messages or user abends. Currently these tables apply only to those messages and abends associated with the external subsystem support in IMS. The tables fall into five categories:

- Category A—Conditions Detected by IMS Modules That Invoke External Subsystem Exits
- Category B—Conditions Detected by External Subsystem Exits
- Category C—Conditions Detected by IMS Common Service Modules
- Category D—Conditions Detected by Control Region Service Modules
- Category E—Conditions Detected by Dependent Region Service Modules

With the function code, the user can determine the IMS module name. The (RC) indicates the problem encountered by the module. Corrective action can then be taken, or, if help is required, contact your IBM support center.

The question marks (??) in categories A, D, and E are substitutions for unsupported return codes received by the listed module. The description indicates the functional area that returned the unsupported return code (that is, an external subsystem exit).

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For categories A and E, the question marks (??) represent return codes received from the IMS internal functions (that is, IMODULE).

For return codes not listed in Category C, refer to Appendix C, “IMS System Services Return Codes,” on page 571 to resolve the code and determine the problem.

Category A—Conditions Detected by IMS Modules That Invoke External Subsystem Exits

Table 129. Conditions Detected by IMS Modules That Invoke External Subsystem Exits

Function Code	Return Code	Module or ID	Description
X'0000'		DFSESD30	ERROR CODE
	X'20'		In the case of an ESS sub-function code or zero, abend U3049 will be issued.
X'0005'		DFSESSO0	SIGNON
	X'??'		sign-on was unsuccessful. The external subsystem returned an unsupported return code.
	X'FF'		The required external subsystem sign-on exit is missing.
	X'FE'		The parameter list passed to DFSESS00, contained an invalid function code.
X'0006'		DFSESD50	SIGNOFF
	X'??'		Sign-off was unsuccessful. The external subsystem returned an unsupported return code.
	X'FF'		The required external subsystem sign-off exit is missing.
X'0007'		DFSESCT0	CREATE THREAD
	X'??'		CREATE THREAD was unsuccessful. The external subsystem returned an unsupported return code.
	X'FF'		The required external subsystem CREATE THREAD exit is missing.
	X'FE'		The parameter list passed to DFSESCT0, contained an invalid function code.
	X'FD'		The parameter list passed to DFSESCT0, contained an invalid parameter count.
X'0008'		DFSESD50	TERMINATE THREAD
	X'??'		TERMINATE THREAD was unsuccessful. The external subsystem returned an unsupported return code.
	X'FF'		The required external subsystem terminate thread exit is missing.
	X'FE'		The parameter list passed to DFSESD50, contained an invalid function code.
X'0009'		DFSESD50	TERMINATE IDENTIFY
	X'??'		TERMINATE IDENTIFY was unsuccessful. The external subsystem returned an unsupported return code.
	X'FF'		The required external subsystem TERMINATE IDENTIFY exit is missing.
X'000D'		DFSESAB0	ABORT AND CONTINUE
	X'??'		Abort and continue was unsuccessful. The external subsystem returned an unsupported return code.
	X'FF'		The required external subsystem abort and continue exit is missing.

Table 129. Conditions Detected by IMS Modules That Invoke External Subsystem Exits (continued)

Function Code	Return Code	Module or ID	Description
X'000E'		DFSESP10	COMMIT PREPARE
	X'??'		COMMIT PREPARE was unsuccessful. The external subsystem returned an unsupported return code.
	X'FF'		The required external subsystem COMMIT PREPARE exit is missing.
X'000F'		DFSESP20	COMMIT CONTINUE
	X'??'		COMMIT PREPARE was unsuccessful. The external subsystem returned an unsupported return code.
	X'FF'		The required external subsystem commit prepare exit is missing.
X'0013'		DFSESD70	INITIALIZATION PHASE 1
	X'04'		Unable to IMODULE GETMAIN a work area.
	X'08'		Unable to IMODULE load DFSESI40. Probable DFSESL DD statement error.
	X'0C'		DFSESI40 or DFSESP10 failed in the loading of the external subsystem storage or modules.
	X'10'		Unable to open the library referenced by the DFSESL DD statement.
	X'??'	Resource ID 'IMOD-GM '	IMODULE GETMAIN failed. Refer to “IMODULE Return Codes” on page 571.
	X'??'	Resource ID 'IMOD-LD '	IMODULE load failed. Refer to “IMODULE Return Codes” on page 571.
	X'0C'	Resource ID 'DFSESL '	Unable to open the library referenced by the DFSESL DD statement.
	X'??'	Resource ID "DFSESI40"	DFSESI40 or DFSESP10 failed in the loading of the external subsystem storage or modules. The return code is returned by DFSESI40.
X'0014'		DFSESD80	INITIALIZATION PHASE 2
	X'??'		Initialization was unsuccessful. The external subsystem returned an unsupported return code.
X'0017'		DFSESS10	External Subsystem Startup Service
	X'04'		The external subsystem is not available at this time. A notify message was queued to the external subsystem.
	X'08'		The external subsystem is not available at this time. IMS is either waiting for the external subsystem notify message or subsystem connection (identify processing) is in progress and has not yet completed.
	X'0C'		The identify failed for either the global or local connection.
	X'10'		IMS is terminating either normally or abnormally.
	X'14'		The external subsystem is terminating.
	X'18'		External subsystem initialization exit indicated IMS should never identify due to a failure encountered by exit.
	X'1C'		DFSESS10 was unable to locate a required resource. When the resource is the external subsystem identify exit, a DFS3608 message is issued. For other resources, a DFS3620 message is issued.

Table 129. Conditions Detected by IMS Modules That Invoke External Subsystem Exits (continued)

Function Code	Return Code	Module or ID	Description
	X'20'		The parameter list passed to DFSESS10 contained an invalid function code.
	X'24'		The external subsystem termination service was called to disconnect the external subsystem from IMS.
	X'28'		The external subsystem connection has been stopped or a stop is in progress.
X'0020'		DFSESD90	TRACE CALL
	X'0C'		The DFSTRACE macro could not provide a trace entry upon request.
	X'10'		Unable to obtain a quick save area using DFSBCB macro.
	X'14'		The storage address passed to DFSESD90 was invalid.
	X'20'		The parameter list passed to DFSESD90 contained an invalid function code.
X'0022'		DFSESD31	NON-MESSAGE DRIVEN ROLB FUNCTION
	X'20'		The parameter list passed to DFSESD31 contained an invalid function code.

Category B—Conditions Detected by External Subsystem Exits

Table 130. Conditions Detected by External Subsystem Exits

Function Code	Return Code	Module or ID	Description
X'0200'			EXTERNAL SUBSYSTEM RESOLVE-IN-DOUBT DETECTING MODULE: EXTERNAL SUBSYSTEM RESOLVE-IN-DOUBT EXIT.
	X'20'		Resolve-in-doubt was unsuccessful. The external subsystem supplied exit encountered an invalid condition while processing the request. Such conditions include invalid save areas, protocol violations, invalid work areas, invalid parameter lists, and so on.
X'0201'			EXTERNAL SUBSYSTEM TERMINATION. DETECTING MODULE: EXTERNAL SUBSYSTEM TERMINATION EXIT.
	X'08'		Subsystem termination was unsuccessful. The external subsystem encountered a failure in the processing of the termination notification. IMS will continue termination processing and honor future connection request.
	X'20'		Subsystem termination was unsuccessful. The external subsystem supplied exit encountered an invalid condition while processing the request. Such conditions include invalid save areas, protocol violations, invalid work areas, invalid parameter lists, and so on.
X'0202'			EXTERNAL SUBSYSTEM INITIALIZATION. DETECTING MODULE: EXTERNAL SUBSYSTEM INITIALIZATION EXIT.
	X'08'		Initialization was unsuccessful. IMS will not initiate a connection to the external subsystem. The control region ESET will be marked unstartable and the `/START SUBSYS` command will reset the condition.

Table 130. Conditions Detected by External Subsystem Exits (continued)

Function Code	Return Code	Module or ID	Description
	X'20'		Initialization was unsuccessful. The external subsystem supplied exit encountered an invalid condition while processing the request. Such conditions include invalid save areas, protocol violations, invalid work areas, invalid parameter lists, and so on.
X'0203'			EXTERNAL SUBSYSTEM TERMINATE IDENTIFY. DETECTING MODULE: EXTERNAL SUBSYSTEM TERMINATE IDENTIFY EXIT.
	X'08'		TERMINATE IDENTIFY was unsuccessful. The external subsystem in processing the request encountered an error. IMS will continue termination processing as if the function completed normally.
	X'20'		TERMINATE IDENTIFY was unsuccessful. The external subsystem supplied exit encountered an invalid condition while processing the request. Such conditions include invalid save areas, protocol violations, invalid work areas, invalid parameter lists, and so on.
X'0281'			EXTERNAL SUBSYSTEM NORMAL CALL. DETECTING MODULE: EXTERNAL SUBSYSTEM NORMAL CALL EXIT.
	X'04'		Normal call was unsuccessful. A resource deadlock was detected by the external subsystem. IMS will terminate the application program with abend U0777. All changes will be backed out and the application will be rescheduled.
	X'08'		Normal call was unsuccessful. A failure in the external subsystem occurred while process the request. IMS will terminate the application with abend U3044.
	X'20'		Normal call was unsuccessful. The external subsystem supplied exit encountered an invalid condition while processing the request. Such conditions include invalid save areas, protocol violations, invalid work areas, invalid parameter lists, and so on If an application is involved, it will terminate with abend U3044.
X'0283'			EXTERNAL SUBSYSTEM NOT OPERATIONAL. DETECTING MODULE: EXTERNAL SUBSYSTEM NOT OPERATIONAL EXIT (SNO).
	X'08'		SNO exit call was unsuccessful. IMS will terminate the application program with abend code U3044. The transaction input will be saved and all uncommitted changes will be backed out.
	X'0C'		SNO exit call was unsuccessful. IMS will terminate the application program with abend U3047 and discard the input.
	X'10'		SNO exit call was unsuccessful. IMS will use the z/OS format abend code returned by the SNO exit to abend the application. It depends on the abend code as to what happens during the IMS program ABORT. It is assumed that when this abend occurs the external subsystem has adequate documentation for installation use to aid in any necessary debugging.
	X'20'		SNO was unsuccessful. The external subsystem supplied exit encountered an invalid condition while processing the request. Such conditions include invalid save areas, protocol violations, invalid work areas, invalid parameter lists, and so on. If an application is involved, it will be terminated with abend U3044.
X'0284'			EXTERNAL SUBSYSTEM ECHO. DETECTING MODULE: EXTERNAL SUBSYSTEM ECHO EXIT.

Table 130. Conditions Detected by External Subsystem Exits (continued)

Function Code	Return Code	Module or ID	Description
	X'20'		ECHO was unsuccessful. The external subsystem supplied exit encountered an invalid condition while processing the request. Such conditions include invalid save areas, protocol violations, invalid work areas, invalid parameter lists, and so on.
X'0285'			EXTERNAL SUBSYSTEM INITIALIZATION. DETECTING MODULE: EXTERNAL SUBSYSTEM INITIALIZATION EXIT. DEPENDENT REGION.
	X'08'		Initialization was unsuccessful. IMS will not initiate a connection to the subsystem for the life of the execution of this dependent region. The dependent region LESE will be marked as never identify.
	X'20'		Initialization was unsuccessful. The external subsystem supplied exit encountered an invalid condition while processing the request. Such conditions include invalid save areas, protocol violations, invalid work areas, invalid parameter lists, and so on. If an application is involved, it will be terminated with abend U3044.
X'0286'			EXTERNAL SUBSYSTEM IDENTIFY. DETECTING MODULE: EXTERNAL SUBSYSTEM IDENTIFY EXIT.
	X'04'		IDENTIFY was unsuccessful. The external subsystem will send the notify message when it is ready to connect.
	X'0C'		IDENTIFY was unsuccessful. The IDENTIFY process failed in the external subsystem.
	X'20'		Identify was unsuccessful. The external subsystem supplied exit encountered an invalid condition while processing the request. Such conditions include invalid save areas, protocol violations, invalid work areas, invalid parameter lists, and so on.
X'0287'			EXTERNAL SUBSYSTEM COMMAND. DETECTING MODULE: EXTERNAL SUBSYSTEM COMMAND EXIT.
	X'20'		Command was unsuccessful. The external subsystem supplied exit encountered an invalid condition while processing the request. Such conditions include invalid save areas, protocol violations, invalid work areas, invalid parameter lists, and so on.
X'0288''			EXTERNAL SUBSYSTEM SIGNON. DETECTING MODULE: EXTERNAL SUBSYSTEM SIGNON EXIT.
	X'04'		Signon was unsuccessful. The external subsystem rejected the specified request. IMS will invoke the not operational exit in the subsystem.
	X'08'		Signon was unsuccessful (temporary nature). The external subsystem was unable to complete the requested because of the unavailability of a required resource. IMS will terminate the application program with abend U3048. IMS multiple transaction mode processing might get this return code when the user ID of the current message fails to sign-on.
	X'0C'		Signon was unsuccessful (permanent nature). The request failed in the external subsystem. IMS will terminate the application program with abend U3045.
	X'10'		Signon was unsuccessful. The request failed in the external subsystem because communication was broken. IMS will terminate the application program with abend code U3044.

Table 130. Conditions Detected by External Subsystem Exits (continued)

Function Code	Return Code	Module or ID	Description
	X'14'		Signon was unsuccessful. The external subsystem was unable to complete the request because of a resource-definitional conflict between the two subsystems. IMS will terminate the application program with abend U3047.
	X'18'		Signon was unsuccessful. The request was rejected because the RECOVERY TOKEN (NID) presented by IMS at sign-on already exists in the external subsystem. This implies that one of the following conditions occurred: 1. Outstanding recovery was not resolved by the resolve-in-doubt exit. 2. IMS was cold started and the contents of the NID occurred once again. IMS will increase the Origin Application Schedule Number (OASN) portion of the recovery token and invoke the sign-on exit again. The application program will not know it happened as in the deadlock abend U0777).
	X'20'		Signon was unsuccessful. The external subsystem supplied exit encountered an invalid condition while processing the request. Such conditions include invalid save areas, protocol violations, invalid work areas, invalid parameter lists, and so on. If an application is involved, it will be terminated with abend U3044.
X'0289'			EXTERNAL SUBSYSTEM SIGNOFF. DETECTING MODULE: EXTERNAL SUBSYSTEM SIGNOFF EXIT
	X'08'		Sign-off was unsuccessful. The external subsystem encountered a failure. IMS will terminate the dependent region connection with the external subsystem and permit other dependent regions to continue processing.
	X'20'		Sign-off was unsuccessful. The external subsystem supplied exit encountered an invalid condition while processing the request. Such conditions include invalid save areas, protocol violations, invalid work areas, invalid parameters lists, and so on. If an application program is involved, it will be terminated with abend U3044.
X'0290'			EXTERNAL SUBSYSTEM CREATE THREAD. DETECTING MODULE: EXTERNAL SUBSYSTEM CREATE THREAD EXIT.
	X'04'		CREATE THREAD was unsuccessful. The external subsystem rejected the specified request. IMS will invoke the not operational exit in the subsystem.
	X'08'		CREATE THREAD was unsuccessful (temporary nature). The external subsystem was unable to complete the request because of unavailable required resources. IMS will terminate the application with abend U3048.
	X'0C'		CREATE THREAD was unsuccessful (permanent nature). The request failed in the external subsystem. IMS will terminate the application program with abend U3045.
	X'10'		CREATE THREAD was unsuccessful. The request failed in the external subsystem because communication has broken down. IMS will terminate the application program with abend U3044.
	X'14'		CREATE THREAD was unsuccessful. The external subsystem was unable to complete the request because of a definitional conflict. IMS will terminate the application program with abend U3047.

Table 130. Conditions Detected by External Subsystem Exits (continued)

Function Code	Return Code	Module or ID	Description
	X'20'		CREATE THREAD was unsuccessful. The external subsystem supplied exit encountered an invalid condition while processing the request. Such conditions include invalid save areas, protocol violations, invalid work areas, invalid parameters lists, and so on. If an application program is involved, it will be terminated with abend U3044.
	X'24'		CREATE THREAD was unsuccessful. A resource deadlock was detected by the external subsystem. IMS will terminate the application program with abend U0777.
X'0291'			EXTERNAL SUBSYSTEM TERMINATE THREAD. DETECTING MODULE: EXTERNAL SUBSYSTEM TERMINATE THREAD EXIT
	X'04'		TERMINATE THREAD with COMMIT OPTION was unsuccessful. The external subsystem failed during must-complete phase two commit processing. IMS will terminate the dependent region connection with the external subsystem and permit other dependent regions to continue processing. Resolve-in-doubt processing will then be performed. IMS will terminate the application with abend U3046 (an abend variation where the input message has been processed and the resources committed). The reason for the abend is that all subsystems attached to the application are using a common recovery token and IMS must preserve it for resolve-in-doubt processing (BMP jobs will have to be resubmitted; they will resume processing after the commit point).
	X'04'		TERMINATE THREAD with ABORT OPTION was unsuccessful. The external subsystem processing of the request failed during an abort phase two commit processing. IMS will terminate the dependent region connection with the external subsystem and permit other dependent regions to continue processing. Resolve-in-doubt processing will then be performed. IMS will terminate the application program with abend U3045 (BMP jobs will have to be resubmitted; they will resume processing at the sync point prior to the incident).
	X'08'		Invalid terminate thread was requested and the terminate thread exit either detected an error with the requested information or considered the request invalid at this time. This return code is only valid when the commit option character string is "de".
	X'20'		TERMINATE THREAD was unsuccessful. The external subsystem supplied exit encountered an invalid condition while processing the request. Such conditions include invalid save areas, protocol violations, invalid work areas, invalid parameters lists, and so on. If an application program is involved, it will be terminated with abend U3044.
X'0292'			EXTERNAL SUBSYSTEM TERMINATE IDENTIFY. DETECTING MODULE: EXTERNAL SUBSYSTEM TERMINATE IDENTIFY EXIT.
	X'08'		TERMINATE IDENTIFY was unsuccessful. The external subsystem encountered a failure in the processing of the request. IMS will continue connection termination processing without affecting other dependent region connections.

Table 130. Conditions Detected by External Subsystem Exits (continued)

Function Code	Return Code	Module or ID	Description
	X'20'		TERMINATE IDENTIFY was unsuccessful. The external subsystem supplied exit encountered an invalid condition while processing the request. Such conditions include invalid save areas, protocol violations, invalid work areas, invalid parameters lists, and so on. If an application program is involved, it will be terminated with abend U3044.
X'0293'			EXTERNAL SUBSYSTEM ABORT AND CONTINUE. DETECTING MODULE: EXTERNAL SUBSYSTEM ABORT AND CONTINUE EXIT.
	X'04'		Abort and continue was unsuccessful. The external subsystem processing of the request failed during abort or failed in the phase two of commit processing. IMS will terminate the dependent region connection with the external subsystem and permit other dependent regions to continue processing. Resolve-in-doubt processing will then be performed in the control region for the Residual Recovery Element (RRE) associated with this application. IMS will terminate the application program with abend U3045 (BMP jobs will have to be resubmitted; they will resume processing at the sync point prior to the incident).
	X'20'		Abort and continue was unsuccessful. The external subsystem supplied exit encountered an invalid condition while processing the request. Such conditions include invalid save areas, protocol violations, invalid work areas, invalid parameters lists, and so on. If an application program is involved, it will be terminated with abend U3044.
X'0294'			EXTERNAL SUBSYSTEM COMMIT PREPARE. DETECTING MODULE: EXTERNAL SUBSYSTEM COMMIT PREPARE EXIT.
	X'04'		COMMIT PREPARE was unsuccessful. The external subsystem is not prepared to perform commit processing. IMS will invoke the subsystem supplied abort exit of all participating subsystems. The application program terminate and discard all uncommitted changes (as if an IMS DL1 ROLB was issued).
	X'08'		COMMIT PREPARE was unsuccessful. Prepare processing failed in the external subsystem. IMS will invoke the subsystem supplied abort exit of all participating subsystem providing the subsystem is not terminating. The application program will be terminated with abend U3044 and all uncommitted changes will be backed out.
	X'18'		COMMIT PREPARE was unsuccessful. The request was rejected because the recovery token (NID) presented by IMS at COMMIT PREPARE already exists in the external subsystem. This implies one of the following conditions occurred: 1. Outstanding recovery was not resolved by the resolve-in-doubt exit. 2. IMS was cold started and the contents of the NID occurred once again. IMS will pseudoabend the application program with abend U3053 and backout all previous updates. The application will be immediately rescheduled. The act of reschedule will update the OASN number to ensure it is not a duplicate. The dependent region connection will be reestablished whereupon the recovery token will be presented to the external subsystem commit prepare exit again.

Table 130. Conditions Detected by External Subsystem Exits (continued)

Function Code	Return Code	Module or ID	Description
	X'20'		COMMIT PREPARE was unsuccessful. The external subsystem supplied exit encountered an invalid condition while processing the request. Such conditions include invalid save areas, protocol violations, invalid work areas, invalid parameters lists, and so on. If an application program is involved, it will be terminated with abend U3044.
X'0295'			EXTERNAL SUBSYSTEM COMMIT CONTINUE. DETECTING MODULE: EXTERNAL SUBSYSTEM COMMIT CONTINUE EXIT.
	X'04'		Commit continue was unsuccessful. The external subsystem processing of the request failed during must-complete (phase two) commit processing. IMS will terminate the dependent region connection with the external subsystem and permit other dependent regions to continue processing. Resolve-in-doubt processing will be performed in the control region for the Residual Recovery Element (RRE) associated with the PST. IMS will terminate the application with abend U3046 (an abend variation where the input message has been processed and the resources committed). The reason for the abend is that all subsystems attached to the application are using a common recovery token and IMS must preserve it for resolve-in-doubt processing (BMP jobs will have to be resubmitted; they will resume normal processing after the commit point).
	X'20'		COMMIT PREPARE was unsuccessful. The external subsystem supplied exit encountered an invalid condition while processing the request. Such conditions include invalid save areas, protocol violations, invalid work areas, invalid parameters lists, and so on. If an application program is involved, it will be terminated with abend U3044.
X'0297'			EXTERNAL SUBSYSTEM IDENTIFY. DETECTING MODULE: EXTERNAL SUBSYSTEM IDENTIFY EXIT.
	X'0C'		IDENTIFY was unsuccessful. The IDENTIFY process failed in the external subsystem.
	X'20'		Identify was unsuccessful. The external subsystem supplied exit encountered an invalid condition while processing the request. Such conditions include invalid save areas, protocol violations, invalid work areas, invalid parameter lists, and so on.

Category C—Conditions Detected by IMS Common Service Modules

Table 131. Conditions Detected by IMS Common Service Modules

Function Code	Return Code	Module or ID	Description
X'0302'		DFSESD40	SERVICE MODULE ROUTER ROUTINE
	X'04'		DFSESD40 attempted to IMODULE load a module.
	X'08'		DFSESD40 was requested to branch to an invalid module.
	X'0C'		Unable to open the library referenced by the DFSESL DD statement.
	X'10'		DFSESD40 failed in an attempt to IMODULE locate the DFSDPDIR.
	X'14'		The address of the local ESET was not in the DFSDPDIR.
	X'20'		The EEVTP passed to DFSESD40 was invalid.

Table 131. Conditions Detected by IMS Common Service Modules (continued)

Function Code	Return Code	Module or ID	Description
X'0303'		DFSESGL0	SERVICE MODULE GLUE ROUTINE
	X'04'		The parameter list passed to DFSESGL0 requested an ILOG request but not for log type X'55'.
	X'20'		The parameter list passed to DFSESG10 an invalid function code.
	X'1C'		Unable to IMODULE GETMAIN an area for an SSOB.
X'0307'		DFSFESP0	SYNC POINT MANAGER
	X'04'		DFSFESP0 was called with an unsupported request call.
	X'08'		Unable to find a global ESET that matches the subsystem name in the RRE which was being processed.

Category D—Conditions Detected by Control Region Service Modules

Table 132. Conditions Detected by Control Region Service Modules

Function Code	Return Code	Module or ID	Description
X'0401''		DFSESI20	DAUGHTER ITASK INITIALIZATION
	X'04'		Unable to IMODULE GETMAIN storage for an work area.
	X'08'		Unable to obtain a quick save area using the DFSBCB macro.
	X'0C'		Unable to create an dispatcher work area using the DFSCDSP macro.
	X'10'		Unable to IMODULE load DFSESI30.
	X'14'		Unable to create the termination ITASK using the DFSCIR macro.
	X'18'		Unable to create the daughter ITASK (DFSESI30) using the DFSCIR macro.
X'0402'		DFSESI30	DAUGHTER ITASK CONTROLLER
	X'10'		Unable to IMODULE load DFSESI50. (Abend U3041)
	X'??'		The external subsystem exit identified by the message DFS3607I returned an unsupported return code. (Message DFS3607I)
X'0403'		DFSESI50	INITIALIZATION EXIT INVOCATION
	X'04'		Unable to IMODULE GETMAIN storage for the storage block DFSIWALE. (Abend U3041)
	X'08'		DFSESI40 or DFSESP10 failed in the loading of the external subsystem storage or modules. (Abend U3041)
	X'0C'		Unable to IMODULE GETMAIN storage for the DFSESL DCB. (Abend U3041)
	X'10'		Unable to IMODULE load DFSESI40. (Abend U3041)
	X'??'		The external subsystem initialization exit returned an unsupported return code. (Message DFS3606I)
X'0404'		DFSESI60	RESOLVE-IN-DOUBT PROCESSOR
	X'08'		Unable to quit save area using DFSBCB macro. (Abend U3041)
	X'??'		The external subsystem resolve-in-doubt exit returned an unsupported return code. (Message DFS3606I)
X'409'		DFSIESI0	MOTHER ITASK CONTROLLER

Table 132. Conditions Detected by Control Region Service Modules (continued)

Function Code	Return Code	Module or ID	Description
	X'04'		Unable to IMODULE load DFSESI00. (Abend U3041)
	X'0C'		Unable to IMODULE load DFSESG10 (Abend U3041)
	X'10'		Unable to IMODULE load DFSESD30 (Abend U3041)
	X'04'		The external subsystem mother tasks (TCB) End of Task Exit routine (ETXR) is schedule and passed an invalid daughter task (TCB). (Abend U3043)
X'0411'		DFSXESI0	MOTHER ITASK INITIALIZATION
	X'04'		Unable to IMODULE GETMAIN storage for the work area.
	X'08'		Unable to obtain a quick save area using the DFSBCB macro.
	X'0C'		Unable to create a dispatcher work area using the DFSCDSP macro.
	X'10'		Unable to IMODULE load DFSIESI0.
	X'14'		Unable to create the termination ITASK using the DFSCIR macro.
	X'18'		Unable to create the mother ITASK (DFSIESI0) using the DFSCIR macro.

Category E—Conditions Detected by Dependent Region Service Modules

Table 133. Conditions Detected by Dependent Region Service Modules

Function Code	Return Code	Module or ID	Description
X'503'		DFSESD10	DEPENDENT REGION - IMS IDENTIFY
	X'??'	Resource ID "IMOD-GM "	IMODULE GETMAIN failed. Refer to “IMODULE Return Codes” on page 571.
	X'??'	Resource ID "IMOD-LD "	IMODULE load failed. Refer to “IMODULE Return Codes” on page 571.
	X'04'	Resource ID "ESETP "	No global ESET prefix either SSM was not specified for the control region or DFSESI00 failed in the processing of the SSM member.
	X'08'	Resource ID "GESE "	Global ESET for required external subsystem has not been defined.
	X'0C'	Resource ID "DFSESL "	Unable to open the library reference by the DFSESL DD statement.
	X'10'	Resource ID "PROCLIB "	An SSM PROCLIB member was specified for the dependent region, but the dependent region JCL did not include a PROCLIB DD statement.
X'0504'		DFSESD20	DEPENDENT REGION - IMS SIGNON
	X'??'	Resource ID "IMOD-GM "	IMODULE GETMAIN failed. Refer to “IMODULE Return Codes” on page 571.
	X'??'	Resource ID "IMOD-LD "	IMODULE load failed. Refer to “IMODULE Return Codes” on page 571.
	X'??'	Resource ID "DFSESI40"	DFSESI40 or DFSESP10 failed in the loading of the external subsystem storage or modules. The return code is returned by DFSESI40.

Table 133. Conditions Detected by Dependent Region Service Modules (continued)

Function Code	Return Code	Module or ID	Description
	X'??'	Resource ID "WALE "	IMODULE GETMAIN failed. Refer to “IMODULE Return Codes” on page 571.
	X'??'	Resource ID 'EZS '	Unable to obtain an EZS block through the service of the DFSBCB macro. The return code is returned by the DFSBCB macro.
	X'??'	Resource ID X'DFSESL'	Unable to open the library referenced by the DFSESL DD statement.
X'0505'	X'??'	DFSESD60	DEPENDENT REGION - IMS CREATE THREAD
	X'??'	Resource ID "IMOD-GM "	IMODULE GETMAIN failed. Refer to “IMODULE Return Codes” on page 571.
X'0506'		DFSESPR0	EXTERNAL SUBSYSTEM PROGRAM REQUEST HANDLER
	X'04'		The local ESET passed to DFSESPR0 does not match a defined external subsystem. (Abend U3042)
	X'08'		The sign-on token passed to DFSESPR0 does not match any the sign-on token passed in the DFSEEVTP for this region. (Abend U3042)
	X'0C'		The local ESET passed to DFSESPR0 has not been defined in the control region. (Abend U3042)
	X'10''		The address of the DFSEZS has not been set in the DFSIWALE. (Abend U3042)
	X'20'		Local ESET prefix does not exist. This condition can occur when this IMS region does not have access to an external subsystem such as DB2 UDB for z/OS. (Abend U3042)
	X'24'		The local ESET passed to DFSESPR0 some unavailable resources. Refer to message DFS3620I. (Abend U3042)
	X'28'		A cell pool is not available. (Abend U3042)
	X'FF'		A required external subsystem exit was not provided. Refer to message DFS3608I. (Abend U3049)
	X'??'		The external subsystem exit referenced in message DFS3607I returned an unsupported return code. (Abend U3049)
X'0507'		DFSVES00	EXTERNAL SUBSYSTEM SVC ROUTER
	X'04'		The SSOB passed to DFSVES00 does not contain the address to a EEVTP.
	X'08'		The DFSDPDIR did not contain the address of a local ESET or it did not match the local ESET passed in the SSOB.
	X'0C'		The DFSLESE did not contain the address of a local ESET prefix or it did not match the local ESET prefix passed in the SSOB.
	X'14'		The local ESET prefix passed to DFSVES00 does not contain the address of a work area (DFSIWALE).
X'0508'		DFSEXM00	SYSTEM SERVICE ASSIST ROUTINE (DFSEXM2)
	X'04'		DFSEEVT contains no address for DFSLESE or DFSIWALE.

Table 133. Conditions Detected by Dependent Region Service Modules (continued)

Function Code	Return Code	Module or ID	Description
	X'08'		A storage allocation error for a message or log service request occurred.
	X'32'		Parameter list error. The PST address is zero, the PSTSOTKN is incorrect, or the DFSEEVT address is zero. For a message service request, the message indicator is missing, the MSG/KEY call address is zero, or the message length is zero. For a log service request, the log length is zero.
X'0509'		DFSEXM00	SYSTEM SERVICE ASSIST ROUTINE (RCVXM2)
	X'24'		DFSEEVT contains no address for DFSLESE or DFSIWALE.

Appendix C. IMS System Services Return Codes

In this section:

- "SVC Return Codes"
- "IMODULE Return Codes"
- "IMSAUTH Return Codes" on page 573
- "DFSBCB Return Codes" on page 576
- "DFSPOOL Macro Return Codes" on page 576

SVC Return Codes

The IMS SVC DFSVC200 routes all IMS SVC requests to the proper service. If an error prevents the SVC from routing the call, DFSVC200 returns one of the following codes in register 15.

1xx—SVC routing function detected an error.

Return Code	Meaning
101	The module invoking the SVC must be running in supervisor state
102	SVC directory block address is zero or unable to locate the directory entry for region
103	Vector table address is zero
104	Invalid function code
105	SVC routine address is zero
106	The dependent region requested an SVC located in the control region private storage.

2xx—SVC branch entry interface detected an error.

Return Code	Meaning
201	Invalid function
202	The SVC directory block address is zero or unable to locate the directory entry for region
203	The vector table address is zero
204	The SVC routine address is zero

IMODULE Return Codes

The IMODULE SVC returns a code in register 15 in the form "ffxxnnnn". Function code "ff" is listed in parentheses next to the function name. The "xx" can be a return code from a z/OS function. If one exists, it will be described within the return codes of each function. The return codes "nnnn", which are unique to each function, are listed under the function. All return codes are hexadecimal numbers.

IMODULE GETMAIN (01)

Return Code	Meaning
00	Storage allocated
04	Storage not allocated
08	Parameter error
38	Caller in SRB or XM mode

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IMODULE LOAD (02)

Return Code	Meaning
00	Module loaded
04	Module not found
08	DFSMODU0 allocation error
0C	BLDL/FETCH allocation error Refer to *Data Administration: Macro Instruction Reference for MVS/DFP*
10	BLDL/FETCH I/O error
14	FETCH invalid record type
18	FETCH invalid address
1C	FETCH program check
20	BLDL/FETCH undefined error
24	DCB not open for BLDL
28	Authorized caller, but module was found in an unauthorized library
2C	Alias names not copied to library
38	Caller in SRB or XM mode, or task mode without an SVRB

IMODULE LOCATE (03)

Return Code	Meaning
0	Storage/module located successfully
04	Storage/module not found
08	Parameter error
38	Caller in SRB or XM mode

IMODULE DELETE (04)

Return Code	Meaning
00	Storage/module released successfully
04	Storage/module not found
08	Parameter error
0C	Storage not released (the “xx” location contains the FREEMAIN return code)
38	Caller in SRB or XM mode

IMODULE DIRLOAD (05)

Return Code	Meaning
00	Module loaded
08	DFSMODU0 allocation error
0C	FETCH allocation error Insufficient storage available in SP 226, SP 230, or SP 255
10	FETCH I/O error
14	FETCH invalid record type
18	FETCH invalid address

1C	FETCH program check
20	FETCH undefined error
38	Caller in SRB or XM mode, or task mode without an SVRB

IMODULE GETSTOR (06)

Return Code	Meaning
00	Storage allocated
04	Storage not allocated
08	Parameter error
10	SCD unavailable for global request

IMODULE FREESTOR (07)

Return Code	Meaning
00	Storage released successfully
04	Storage not released (the “xx” location contains the FREEMAIN return code)
08	Parameter error
0C	Unable to locate SDE (global storage not released)
10	SCD unavailable for global request

Other IMODULE Return Codes

Return Code	Meaning
3C	DFSMODU0 unable to obtain internal work area
40	Invalid function request

IMSAUTH Return Codes

The IMSAUTH SVC returns a code in register 15 in form “ffnnnnnn”. Function code “ff” is listed in parentheses next to the function name. The return codes “nnnnnn”, which are unique to each function, are listed under the function. All codes are hexadecimal numbers.

IMSAUTH PGFIX (04)

IMSAUTH PGFREE (08)

Return Code	Meaning
00	Storage successfully page fixed/page freed
04	One or more entries in error
08	One or more list prefixes in error
0C	Address validity check error
10	List alignment error

IMSAUTH RSETAUTH (18)

IMSAUTH SETAUTH (20)

Return Code	Meaning
00	Request successful
04	Caller not authorized

IMSAUTH NOSWAP (1C)

This function does not issue any unique return codes.

IMSAUTH BLDMTMWH (2C)

Return Code	Meaning
00	MTMWQHDR built successfully
04	MTMWQHDR exists for another IMS
08	MTMWQHDR exists for caller
0C	Caller not authorized
10	GETMAIN failed for MTMWQHDR in SP 245
1C	SSCT not found

IMSAUTH DELMTMWH (30)

Return Code	Meaning
00	MTMWQHDR disconnected
04	MTMWQHDR and blocks disconnected and freed
08	MTMWQHDR not found
0C	Caller not authorized
10	FREEMAIN failed for MTMWQHDR in subpool 245
1C	SSCT not found

IMSAUTH SSCTSCD (34)

Return Code	Meaning
00	SCD address stored successfully
0C	Caller not authorized
1C	SSCT not found

IMSAUTH SWAP (3C)

Return Code	Meaning
00	Address space marked swappable
04	Request is not for current address space
08	Request not authorized

IMSAUTH LOCSSCT (40)

Return Code	Meaning
00	SSCT located successfully
04	SSCT not found

IMSAUTH BLDSSCT (48)

Return Code	Meaning
00	SSCT successfully built
0C	Caller not authorized
10	GETMAIN failed for SSCT in subpool 245
18	Unable to load module DFSRTMI0

| **20** Unable to establish a resource cleanup environment for IMS

IMSAUTH INITSSVT (4C)

IMSAUTH TERMSSVT (50)

Return Code	Meaning
00	Request successful
04	SSCT not found
0C	Caller not authorized

IMSAUTH BLDIRLM (54)

Return Code	Meaning
00	Request successful
04	IRLM not active
08	IMODULE GETMAIN failed
1C	SSCT not found

IMSAUTH SSCTIRLM (60)

IMSAUTH RSETIRLM (64)

Return Code	Meaning
00	Request successful
04	Caller not authorized
1C	SSCT not found

IMSAUTH BDUSRSSI (6C)

Return Code	Meaning
00	SSCT successfully built
08	Parameter list invalid
0C	Caller not authorized
10	GETMAIN failed for SSCT or SSVT in subpool 245

IMSAUTH BDSSIBLK (70)

Return Code	Meaning
00	Block successfully copied and connected to SSCT
04	SSCT not found
08	Parameter list invalid
0C	Caller not authorized
10	GETMAIN failed for block in subpool 231.

Other IMSAUTH Return Codes

Return Code	Meaning
14	Invalid function

DFSBCB Return Codes

DFSBCB is a storage manager service which manages storage in specific storage pools, referred to as CBT pools, by using the GET and RELease functions. After returning from DFSBCB, register 15 contains the return code in the form xxxxyyyy. The low 16 bits, yyyy, contain the return code from DFSBCB. The high 16 bits, xxxx, might contain qualifying information. All return codes from DFSBCB requests are hexadecimal numbers.

Return Code	Meaning
04	All requested level 1 blocks were not available.
08	No existing storage was available for the request. IMODULE GETMAIN failed while attempting to obtain a new IPAGE. The IMODULE GETMAIN return code is xxxx.
0C	IMODULE GETMAIN failed for a BCB IPAGE element. The IMODULE GETMAIN return code is xxxx.
10	A RELease request was passed an invalid block address. The reason code is xxxx. **0** Address is 0 or <0 **4** Block is not the type specified. **8** Block was not allocated.
14	A GET or RELease request was passed zero or a negative number for the number of blocks.
18	DFSBCB00 had to get another IPAGE of storage for the requested block, but the pool could not be expanded by batch.
1C	A BCB queue element was needed for register storage, an AWE, or a latch control area for non-ITASK latching, but there were no free BCBQEs. IMODULE GETMAIN failed while attempting to get a new BCBQE IPAGE. The IMODULE GETMAIN return code is xxxx.
20	A GET request was received for an SRBC block, but the common SRB pool was empty.
28	A new BCB IPAGE was unable to be obtained because the IPAGE page formatter was unable to successfully format the IPAGE. The page formatter's return code is in the high half-word of the return code (xxxx).
2c	A new BCB IPAGE was unable to be obtained because the storage for the requested BCB block was required to be page-fixed, and the page-fix service failed. The page fix service return code is in the high half-word of the return code (xxxx).
30	A new BCB IPAGE was unable to be obtained; the IPAGE get module, DFSSTM00, returned an unexpected return code. The return code from a failing lower level service (if any) will be placed in the high half-word of the return code (xxxx).

DFSPOOL Macro Return Codes

The IMS storage pool manager is called by various internal modules to provide storage management services. The DFSPOOL macro is provided as an interface to the storage pool. DFSPOOL returns all of the return codes in register 15. All return codes are hexadecimal numbers.

After returning from a DFSPOOL GET request, register 15 contains the return code in the form *xxxxyyyy*. The low 16 bits, *yyyy*, contain the return code from DFSPOOL. The high 16 bits, *xxxx*, contain the IMODULE return code if an IMODULE error was detected.

DFSPOOL ALLOC

The ALLOC function allows the caller to allocate one or more predefined IMS storage pools.

Return Code	Meaning

00	The storage pool was successfully allocated.
04	The pool was ignored; PALCNULL ('FF') was set.
08	A duplicate pool name was passed. The pool name already exists in the hash table.
0C	Allocation for the requested pool is already in progress.
10	One or more primary blocks could not be allocated.
20	A pool definition for the requested pool was not found in DFSSPM10.
24	IMODULE GETMAIN failed while attempting to allocate the pool header.
28	The size specified for the variable pool is zero.
2C	IMODULE GETMAIN failed while attempting to allocate the variable pool.
30	IMODULE GETMAIN failed while attempting to allocate FAQE storage.
34	The accumulated size of the primary blocks to be allocated exceeds the maximum storage available to the pool.
44	IMODULE GETMAIN failed while attempting to allocate a work area.
A0	An invalid function code was passed to the storage manager.

Note: For return codes less than X'20', a pool header was allocated and buffers can be obtained from the pool. For return codes X'20' or greater, one or more pools could not be allocated.

DFSPOOL GET

The GET function allows the caller to obtain a buffer from one of the previously allocated storage pools.

Return Code	Meaning
00	The buffer was successfully allocated.
04	The upper limit for the pool would have been exceeded if the request had been satisfied. Since the caller specified WAIT=NO, the storage manager returned immediately to the caller. The buffer was not allocated.
08	The upper limit for the pool would have been exceeded if the request had been satisfied. Since the caller specified WAIT=YES, the storage manager allowed the caller to wait and make additional attempts for storage. However, the caller waited for the maximum period of time, and the storage was still unavailable. The buffer was not allocated.
0C	IMODULE GETSTOR failed while attempting to obtain a new block of storage. The return code contains the IMODULE return code in high two bytes and the storage manager return code in low two bytes.
20	The storage pool resides in private storage, but the caller is not executing in the same address space.
28	Buffer request cannot be satisfied. Request size exceeds available storage.
24	The buffer request size was equal to or less than zero.
A0	An invalid function code was passed to the storage manager.
A4	An invalid pool name was passed to the storage manager.

DFSPOOL REL

The REL function allows the caller to return a buffer to an existing storage pool.

Return Code	Meaning
00	The buffer was successfully released.
A0	An invalid function code was passed to the storage manager.
A4	An invalid pool name was passed to the storage manager.

Appendix D. OM Command Return and Reason Codes

This section defines the return and reason codes (Table 134) and completion codes (Table 135 on page 581) for all IMS commands that are routed from the Operations Manager, which are listed in the DFSCMDRR macro.

In this section:

- "Return and Reason Codes"
- "Completion Codes" on page 581

Return and Reason Codes

Table 134. OM Command Return and Reason Codes

Return Code	Reason Code	Meaning
X'00000000'	X'00000000'	The request completed successfully.
X'00000004'		A warning occurred.
	X'00001000'	This IMS is not the master. The command is ignored.
	X'00001004'	Only a partial list of resources was returned.
	X'0000100C'	The command was not processed on one or more IMSs because the command is not applicable or the IMS was down.
X'00000008'		A parameter error occurred.
	X'00002000'	An invalid command was issued.
	X'00002004'	An invalid command keyword was used.
	X'00002008'	There were an insufficient number of keywords specified for the command.
	X'0000200C'	No resources were found.
	X'00002010'	A generic value is not supported for this parameter.
	X'00002014'	An invalid character was specified in the resource name.
	X'00002020'	An invalid rate value was specified.
	X'00002040'	No filter, an invalid filter, or an insufficient number of filters were specified.
	X'00002044'	An `UPDATE TRAN START` command was issued with the same attribute as an `UPDATE TRAN STOP` command; or, an `UPDATE TRAN STOP` command was issued with the same attribute as an `UPDATE TRAN START` command. Issuing the second command with the same attribute as the first cancels the intended result of the first command.
	X'00002048'	An invalid set attribute was specified.
	X'0000204C'	An invalid CLS value was specified.
	X'00002050'	An invalid CPRI value was specified.
	X'00002054'	An invalid LCT value was specified.
	X'00002058'	An invalid LPRI value was specified.
	X'0000205C'	An invalid MAXRGN value was specified.
	X'00002060'	An invalid NPRI value was specified.
	X'00002064'	An invalid PARLIM value was specified.
	X'00002068'	An invalid PLCT value was specified.

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Table 134. OM Command Return and Reason Codes (continued)

Return Code	Reason Code	Meaning
	X'0000206C'	An invalid SEGNO value was specified.
	X'00002070'	An invalid SEGSZ value was specified.
X'0000000C'		A list error occurred. For details on the associated completion codes, see “Completion Codes” on page 581.
	X'00003000'	At least one request was successful.
	X'00003004'	No requests were successful.
X'00000010'		An environment error occurred.
	X'00004000'	An IMS restart is required, or an IMS restart did not complete.
	X'00004004'	There is no CQS address space available.
	X'00004005'	The global queue counts were requested but could not be obtained by the master IMS because the master IMS is not connected to the structure.
	X'00004008'	The command that was entered, the keyword, or the command and keyword combined is invalid for the active XRF.
	X'0000400C'	The command that was just entered, the keyword, or the command and keyword combined is invalid for the alternate XRF.
	X'00004010'	The command that was just entered, the keyword, or the command and keyword combined is invalid for the active RSR.
	X'00004014'	The command that was just entered, the keyword, or the command and keyword combined is invalid for the RSR tracking system.
	X'00004018'	No resource structure was found, or it is not available.
	X'0000401C'	The command that was just entered, the keyword, or the command and keyword combined is invalid for the FDR region.
	X'00004020'	No Online Reorganization license is registered.
	X'00004030'	An invalid command was issued for LSO=Y.
	X'00004040'	The LE header was not initialized.
	X'00004100'	The resource structure is full.
	X'00004104'	There is no RM address space.
	X'00004108'	There is no SCI address space.
	X'0000410C'	Local online change is enabled.
	X'00004110'	The IMS command master is not in online change state.
	X'00004111'	There is no entry in IMS for the master in the global Online Change Status data set (OLCSTAT).
	X'00004114'	A data set access error occurred.
	X'00004118'	A data set allocation error occurred.
	X'0000411C'	The contents of the data set are invalid.
	X'00004120'	Online change phase is in progress.
	X'00004124'	A system-wide process attempted to run while a process of the same type was already running. The second process attempt failed.
	X'00004128'	No IMSplex-wide processes are in progress.
	X'00004200'	IMS shutdown is in progress.
X'00000014'		A system error occurred.
	X'00005000'	An IMODULE GETSTOR error occurred.

Table 134. OM Command Return and Reason Codes (continued)

Return Code	Reason Code	Meaning
	X'00005004'	A DFSOCMD0 GETBUF error occurred.
	X'00005008'	A DFSPOOL GET error occurred.
	X'0000500C'	An AWE GET error occurred.
	X'00005010'	IMS was unable to obtain a latch.
	X'00005050'	An command processing error occurred. For more information, refer to the error messages that were issued.
	X'00005054'	Message formatting terminated due to an internal message-length error for a pre-edited message.
	X'00005100'	An RM request error occurred.
	X'00005104'	An unexpected CQS error occurred.
	X'00005108'	An SCI request error occurred.
	X'0000510C'	Process step is already in progress.
	X'00005FFF'	An IMS internal error occurred.

Completion Codes

The following completion codes are generated in list format as the command output for each resource on which the command ran. These completion codes will be preceded by a return and reason code of RC=X'00000000' RN=X'00000000', RC=X'0000000C' RN=X'00003000' or RC=X'0000000C' RN=X'00003004'.

These completion codes are character representations of hexadecimal numbers.

Table 135. IMSplex Completion Codes

Completion Code	Meaning
C' 0'	The request was successful.
C' 1'	The command that was issued is not applicable to this IMS.
C' 2'	The command was not attempted by this IMS.
C' 3'	IMS is already in the requests online change state.
C' 4'	The online change phase is incomplete on this IMS.
C' 8'	The command is complete for some.
C' C'	The command is complete for none.
C' 10'	The resource name is invalid.
C' 11'	There is a duplicate resource name.
C' 14'	The resource is not a partition name.
C' 18'	The partition was deleted by OLC.
C' 1C'	The resource is a partitioned secondary index.
C' 20'	The INIT OLREORG issued, OLR is already in progress.
C' 24'	No OLR is in progress.
C' 28'	No DMB loaded. Need to schedule a PSB that references the database.
C' 30'	The command is invalid for the transaction that was dynamically built for shared queues.
C' 31'	Command is invalid for a DEDB.
C' 32'	Command is invalid for a MSDB.

Table 135. IMSplex Completion Codes (continued)

Completion Code	Meaning
C' 33'	Command is invalid for a HALDB master.
C' 34'	The command is invalid for a CPIC transaction.
C' 38'	The command is invalid for BMP.
C' 3C'	There is no load balancing. MAXRGN is invalid.
C' 40'	PARLIM cannot be changed.
C' 44'	The transaction is busy. The command is rejected.
C' 45'	The transaction has an invalid SID#.
C' 50'	CQS is unavailable.
C' 51'	No resource structure exists.
C' 52'	The resource structure is full.
C' 53'	No RM address space exists.
C' 54'	No SCI address space exists.
C' 55'	No FASTPATH installed.
C' 56'	Full Function (DLI) DB + Local Storage Option + XRF Tracker.
C' 57'	No queue structure.
C' 58'	IMS is not using RM services (RMENV=N).
C' 60'	A GETMAIN storage error occurred.
C' 61'	A DFSBCB storage error occurred.
C' 62'	A HIOP storage error occurred.
C' 63'	A WKAP storage error occurred.
C' 64'	A GETSTOR storage error occurred.
C' 65'	DMB pool storage error.
C' 66'	DMB pool full.
C' 70'	A module load error occurred.
C' 71'	A module locate error occurred.
C' 72'	A randomizer load error occurred.
C' 80'	A data set error occurred.
C' 81'	DBRC error.
C' 90'	An internal error occurred.
C' 91'	A time-out error occurred.
C' 92'	Command processing error.
C' 94'	A RM request error occurred.
C' 95'	An SCI request error occurred.
C' 98'	A CQS request error occurred.
C' A0'	Dynamic allocation failed.
C' A1'	The database is authorized by batch.
C' A2'	The database is authorized by another IMS.
C' A3'	The authorization change failed.
C' A4'	The database is not registered to DBRC.
C' A5'	Prevent further DBRC authorizations of database.

Table 135. IMSplex Completion Codes (continued)

Completion Code	Meaning
C' A6'	Invalid database record in the RECON data set.
C' A7'	The DBRC UNAUTH failed for CHNGAUTH.
C' A8'	Invalid database record in the RECON data set.
C' A9'	Database authorization error.
C' AA'	Database in use - BMP.
C' AB'	Database in use - DBCTL long thread.
C' AC'	Fastpath area held - long busy wait.
C' AD'	Dynamic unallocation failed.
C' AE'	Dynamic allocation error.
C' AF'	Database in use by a dependent region in OLC wait.
C' B0'	A resource definition error occurred.
C' B1'	A resource state error occurred.
C' B2'	An IMS state error occurred.
C' C1'	OLR DDIR missing or DFSPNT zero.
C' C2'	OLR already owned.
C' C3'	OLR partition STOPPED/LOCKED/DBDUMPED.
C' C4'	OLR partition being recovered.
C' C5'	OLR partition access not UPDATE/EXCLUSIVE.
C' C6'	OLR scheduling failed.
C' C7'	OLR partition not authorized.
C' C8'	OLR master database STOPPED/LOCKED/DBDUMPED.
C' C9'	OLR master database access not UPDATE/EXCLUSIVE.
C' CA'	OLR set ownership failed.
C' CB'	The partition is not in specified status.
C' CC'	OLR already active for the partition.
C' CD'	HALDB OLR attempted for an RSR-covered HALDB.
C' D0'	Database CLOSE error.
C' D1'	Database WRITE error.
C' D2'	The database needs backout.
C' D3'	The database or area needs recovery.
C' D4'	The database needs image copy.
C' D5'	The database has no backouts.
C' D6'	The database is in use.
C' D7'	The database I/O prevention not complete.
C' D8'	The database backouts are pending.
C' D9'	The database OPEN failed.
C' DA'	The database being recalled from HSM.
C' DB'	The partition OPEN failed.
C' DC'	HALDB partition build failure.
C' DD'	HALDB partition INIT failure.

Table 135. IMSplex Completion Codes (continued)

Completion Code	Meaning
C' DE'	ACBLIB read failure.
C' DF'	Database directory INIT failure.
C' E0'	Database or area in recovery.
C' E2'	The parallel database OPEN not complete.
C' EE'	Database backout error.
C' EF'	Database is in error.
C' F0'	No area lock.
C' F1'	Area not stopped.
C' F2'	Preload is active for area.
C' F3'	Unresolved indoubts for area.
C' F4'	Allocation failed.
C' F5'	Area needs recovery.
C' F6'	ADS number discrepancy.
C' F7'	Area is not loaded into CF.
C' F8'	Area has I/O tolerated CI.

Appendix E. DL/I Codes

This section discusses DL/I codes:

- “DL/I Return and Reason Codes”
- “DL/I Status Codes” on page 614

DL/I Return and Reason Codes

This topic contains reference information on the return and reason codes. These codes are returned in the AIB when you use the AIB interface.

The following topics provide additional information:

- “Return and Reason Code Tables”
- “Status Code Explanations” on page 624

Return and Reason Code Tables

The tables in this topic briefly explain each return and reason code, and list the calls for which these codes can be received.

If you receive the X'0900' return code, you must look at the status code in the PCB. You may also want to look at the status code if you do not receive X'0900' but have a PCB associated with the call. (For detailed explanations of the status codes, see “DL/I Status Codes” on page 614.) For DL/I return codes, see:

- Table 136 for DL/I return codes
- Table 137 on page 586 for database calls
- Table 138 on page 591 for message calls
- Table 139 on page 597 for system service calls

For expanded descriptions of the return and reason codes, see “DL/I Return and Reason Code Explanations” on page 603.

Table 136. DL/I Return Codes

Return Code (Hex)	Description
0000	Call was completed successfully.
0004	Call was completed with information.
0008	Call was completed with warning.
00F0	An error was detected by the Queue Control Facility (CQF) routines
0100	Call was completed with exception.
0104	Call incomplete -- application error.
0108	Call incomplete -- system error.
010C	Call incomplete -- unavailable data.
0110	Call incomplete -- authorization error.
0900	PCB status code analysis required.

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Table 137. Database Calls

Return Code (Hex)	Reason Code (Hex)	Database Calls	Description
0000	0000	CLSE (GSAM) DEQ GU, GHU GN, GHN GNP, GHNP DLET, REPL ISRT (LOAD) ISRT (ADD) FLD POS OPEN (GSAM)	Call was completed successfully. Proceed.
0004	0004		Segment returned to I/O area. This is the last segment.
0004	0014		No more messages are available. No segment is returned.
0004	0018		No more messages are available. No segment is returned.
0004	0048		AO application waiting for AOI message was posted due to IMS system shutdown. No message segment returned.
0004	004C		AO application waiting for AOI message was posted due to/PSTOP region command. No message segment is returned.
0100	000C		The output area was not large enough to contain all the data. Only partial data was returned.
0104	0204	CIMS TERM	No value specified for IMS DB ID in AIBRSNM2 field.
0104	0208	CLSE (GSAM) DEQ GU, GHU GN, GHN GNP, GHNP DLET, REPL ISRT (LOAD) ISRT (ADD) FLD POS OPEN (GSAM)	An invalid PCB name was passed in the AIB.

Table 137. Database Calls (continued)

Return Code (Hex)	Reason Code (Hex)	Database Calls	Description
0104	020C	CLSE (GSAM) DEQ GU, GHU GN, GHN GNP, GHNP DLET, REPL ISRT (LOAD) ISRT (ADD) FLD POS OPEN (GSAM)	No PSB scheduled. Call before APSB.
0104	0210		The output area length in the AIB was invalid. No data is returned.
0104	0218	CIMS INIT CIMS TERM	Invalid sub-function code.
0104	021C		No AOI token specified in AIB on initial GMSG call.
0104	0220		GMSG call with WAITAOI specified did not specify an AOI token.
0104	0224		AOI token specified on GMSG call contained one or more invalid characters. AOI token may contain characters A-Z, O-9, @, #, and $.
0104	0228	CIMS INIT CIMS TERM CIMS TALL	Invalid AIBLEN must be a minimum of 264 bytes.
0104	0404		Invalid function code.
0104	0440		Invalid call from non-CPI-C application.
0104	0444		Invalid from the specific environment.
0104	0448		Invalid call from CPI-C application.
0104	044C		Invalid call from DEP region type.
0104	0450		No messages to retrieve. AO user exit DFSAOE00 does not exist.
0104	0464		Call issued before a PSB was scheduled.
0104	048C		APSB for PSB with no DPSB.
0104	0490		DPSB with no CPI-RR commit.
0104	0494		PSB not allocated.
0104	054C		Invalid output destination.
0104	0550		DEALLOC_ABND issued for destination.

Table 137. Database Calls (continued)

Return Code (Hex)	Reason Code (Hex)	Database Calls	Description
0104	060C		Invalid AUTH class name specified.
0104	0610	CLSE (GSAM) DEQ GU, GHU GN, GHN GNP, GHNP DLET, REPL ISRT (LOAD) ISRT (ADD) FLD POS OPEN (GSAM)	Required I/O area address parameter missing. No data is returned.
0104	0618		I/O area length is longer than the PSB work area defined by the IOASIZE parameter on PSBGEN.
0104	0620		ZZ field of the I/O area is not zero.
0104	0754		The segment length is less than 5.
0104	0810		Required option list parameter is missing.
0104	0920		Queue Space Notification Exit (DFSQSPC0) determined that the application has reached its limit of data that can be inserted to the message queue.
0104	1004		Command as entered not allowed from an application.
0104	1008		Invalid command verb specified in I/O area.
0104	1010		ICMD call was not issued before RCMD call.
0108	0004		Error encountered during PC router processing.
0108	0010	CIMS INIT	Unable to obtain private storage. GETMAIN failure trying to obtain required DRA storage.
0108	001C	CIMS INIT	ATTACH of the DRA TCB failed.
0108	0014		Unable to obtain global storage.
0108	0018		Internal latch error. For GMSG call, no segment is returned.

Table 137. Database Calls (continued)

Return Code (Hex)	Reason Code (Hex)	Database Calls	Description
0108	0020	CIMS INIT	Load of required DRA module failed. The name of the module is returned in AIBSNM2. Or: Load of DRA startup table (DFScccc0) failed. The table name is returned in AIBRSNM2 (only when AIBRSNM2=DBCTLID
0108	0024	CIMS INIT	OPEN of DRA RELIB failed.
0108	002C	CIMS INIT	MVS Name/Token service failed.
0108	0030		Spool API data set CLOSE error.
0108	0034		Spool API data set deallocation (DYNALLOC) error.
0108	0038		Spool API data set allocation (DYNALLOC) error.
0108	003C		Spool API data set OPEN error.
0108	0040		Spool API WRITE to data set error.
0108	0044		Spool API create output descriptor (OUTADD) error.
0108	0048		Spool API delete output descriptor (OUTDEL) error.
0108	0060		DFSLUMIF failure.
0108	0064		DFSYFND failure.
0108	0068		DFSYLUM failure.
0108	0080		RACINIT failure - LU 6.2 originated transaction.
0108	0220		PST 62 extension was not found.
0108	020C		Invalid AWE encountered during command processing.
0108	0214	CIMS INIT	Required DFSPRP parameters not specified correctly.
0108	0224		Security UTOKEN not found.
0108	0240		Internal error. PST posted with invalid post code. No segment returned.
0108	0244		PST posted during abnormal terminate thread processing. No segment returned.
0108	0304		PSB was not found.
0108	0308		PSB authorization failure.
0108	030C		PSB permanently bad.

Table 137. Database Calls (continued)

Return Code (Hex)	Reason Code (Hex)	Database Calls	Description
0108	0310		Fast Path DB stopped/locked.
0108	0314		PSB already scheduled.
0108	0318		PSB stopped/locked.
0108	031C		I/O error reading PSB/DMB.
0108	0320		PSBW/DMB/PSB pool too small.
0108	0324		Invalid option 'L' or 'LS'.
0108	0328		Fast Path buffer fix error.
0108	032C		Invalid processing intent.
0108	0540	CIMS INIT CIMS TERM	No active communication with IMS DB.
0108	0544	CIMS INIT	RRS/MVS is not active. The CIMS INIT c all cannot be issued. This only applies when AIBRSNM2=DBCTLID.
0110	000C		Resource specified was not authorized.
0110	0020		Program not authorized to RACF.
0110	0024		Userid not authorized to RACF.
0110	0028		Program not authorized to issue the command.
0110	002C		Userid not authorized to issue the command.
0110	0030		DFSCCMD0 indicated program was not authorized to issue command.
0110	0034		DFSCCMD0 indicated userid was not authorized to issue command.
0110	0038		ICMD call not authorized from any program (AOIS=N).
0110	003C		RACF not available for authorization check (AOIS=A|R).
0110	0040		DFSCCMD0 not available for authorization check (AOIS=A|C).
0110	0044		Transaction not authorized to RACF.
0110	0048		Transaction not authorized to issue the command.
0110	004C		DFSCCMD0 indicated transaction was not authorized to issue command.
0110	0050		A CPI-C driven application issued an APSB call and the userid is not authorized to RACF.

Table 137. Database Calls (continued)

Return Code (Hex)	Reason Code (Hex)	Database Calls	Description
0110	0054		Command not authorized to RACF.
0110	0058		Command not authorized to issue the transaction.
0110	005C		DFSCCMD0 indicated that the command was not authorized to be issued by the transaction.
0110	0070	CIMS INIT	The DRA execution library is not authorized.
0900		CLSE (GSAM) DEQ GU, GHU GN, GHN GNP, GHNP DLET, REPL ISRT (LOAD) ISRT (ADD) FLD POS OPEN (GSAM)	Reason code unmodified on 0900. PCB status code analysis required.

Table 138. Message Calls

Return Code (Hex)	Reason Code (Hex)	Message Calls	Description
0000	0000	AUTH GU GN ISRT CHNG CMD GCMD PURG SETO	Call was completed successfully. Proceed.
0004	0004		Segment returned to I/O area. This is the last segment.
0004	0014		No more messages are available. No segment is returned.
0004	0018		No more messages are available. No segment is returned.
0004	0048		AO application waiting for AOI message was posted due to IMS system shutdown. No message segment returned.
0004	004C		AO application waiting for AOI message was posted due to /PSTOP region command. No message segment is returned.

Table 138. Message Calls (continued)

Return Code (Hex)	Reason Code (Hex)	Message Calls	Description
00F0	Any	GU GN ISRT CMD GCMD PURG	Invalid call using the MRQPSB block or error detected by the Queue Control Facility (QCF) routines.
0100	000C		The output area was not large enough to contain all the data. Only partial data was returned.
0104	020C	AUTH GU GN ISRT CHNG CMD GCMD PURG SETO	No PSB scheduled. Call before APSB.
0104	0208	AUTH GU GN ISRT CHNG CMD GCMD PURG SETO	An invalid PCB name was passed in the AIB.
0104	0210	AUTH	The output area length in the AIB was invalid. No data is returned.
0104	0218		Subfunction unknown or invalid.
0104	021C		No AOI token specified in AIB on initial GMSG call.
0104	0220		GMSG call with WAITAOI specified did not specify an AOI token.
0104	0224		AOI token specified on GMSG call contained one or more invalid characters. AOI token may contain characters A-Z, 0-9, @, #, and $.
0104	0300	Java GU	An IMS application attempted to issue a GU message prior to issuing a Java commit.
0104	0404		Invalid function code.
0104	0440		Invalid call.
0104	0444		Invalid from the specific environment.

Table 138. Message Calls (continued)

Return Code (Hex)	Reason Code (Hex)	Message Calls	Description
0104	0448	SETO	Invalid call from CPI-C application.
0104	044C	SETO	Invalid call from DEP region type.
0104	0450		No messages to retrieve. AO user exit DFSAOE00 does not exist.
0104	048C		APSB for PSB with no DPSB.
0104	0490		DPSB with no CPI-RR commit.
0104	0494		PSB not allocated.
0104	054C	SETO	Invalid output destination.
0104	0550	ISRT SETO	DEALLOC_ABND issued for destination.
0104	0560	CHNG ISRT	An error was encountered when attempting to process a routing request from either the DFSCMPR0 or DFSMSCE0 user routing exit. A1 status code is set.
0104	0564	CHNG ISRT	Either the DFSCMPR0 or DFSMSCE0 user routing exit rejected the call with a A1 status code.
0104	0568	CHNG ISRT	The DFSMSCE0 user routing exit rejected the call with a U3303 abend. A1 status code is set.
0104	056C	CHNG ISRT	The DFSMSCE0 user routing exit rejected the call with a A4 status code.
0104	0570	CHNG ISRT	The DFSMSCE0 user routing exit rejected the call with a E1 status code.
0104	0574	CHNG ISRT	The DFSMSCE0 user routing exit rejected the call with a E2 status code.
0104	0578	CHNG ISRT	The DFSMSCE0 user exit rejected the call with a E3 status code.
0104	057C	CHNG ISRT	An error was encountered while processing a request from either the DFSCMPR0 or DFSMSCE0 user routing exit to override a MSC direct routing request message. Error status QH or XF is set.

Table 138. Message Calls (continued)

Return Code (Hex)	Reason Code (Hex)	Message Calls	Description
0104	060C	AUTH	Invalid AUTH class name specified.
0104	0610	AUTH GU GN ISRT CHNG CMD GCMD PURG SETO	Required I/O area address parameter missing. No data is returned.
0104	0618		I/O area length is longer than the PSB work area defined by the IOASIZE parameter on PSBGEN.
0104	0620	AUTH	ZZ field of I/O area not zero.
0104	0754	ISRT SETO	The segment length is less than 5.
0104	0810	SETO	Required option list parameter is missing.
0104	0920	ISRT SETO	Queue Space Notification Exit (DFSQSPC0) determined the application has reached its limit of data that can be inserted to the message queue.
0104	1004		Command as entered not allowed from an application.
0104	1008		Invalid command verb specified in I/O area.
0104	1010		ICMD call was not issued before RCMD call.
0108	0004		Error encountered during PC router processing.
0108	0010	ISRT CHNG SETO	Unable to obtain private storage.
0108	0014	GU CHNG SETO	Unable to obtain global storage.
0108	0018		Internal latch error. For GMSG call, no segment is returned.
0108	0030	PURG	Spool API data set CLOSE error.
0108	0034	PURG	Spool API data set deallocation (DYNALLOC) error.

Table 138. Message Calls (continued)

Return Code (Hex)	Reason Code (Hex)	Message Calls	Description
0108	0038	ISRT	Spool API data set allocation (DYNALLOC) error.
0108	003C	ISRT	Spool API data set OPEN error.
0108	0040	ISRT	Spool API WRITE to data set error.
0108	0044	CHNG	Spool API create output descriptor (OUTADD) error.
0108	0048	CHNG	Spool API delete output descriptor (OUTDEL) error.
0108	0060	GU ISRT CHNG SETO	DFSLUMIF failure.
0108	0064	ISRT CHNG PURG	DFSYFND failure.
0108	0068		DFSYLUM failure.
0108	0080	AUTH	RACINIT failure - LU 6.2 originated transaction.
0108	020C		Invalid AWE encountered during command processing.
0108	0220	AUTH	PST 62 extension was not found.
0108	0224	AUTH	Security UTOKEN not found.
0108	0240		Internal error, PST posted with invalid post code. No segment returned.
0108	0244		PST posted during abnormal terminate thread processing. No segment returned.
0108	0304		PSB was not found.
0108	0308		PSB authorization failure.
0108	030C		PSB permanently bad.
0108	0310		Fast Path DB stopped/locked.
0108	0314		PSB already scheduled.
0108	0318		PSB stopped/locked.
0108	031C		I/O error reading PSB/DMB.
0108	0320		PSBW/DMB/PSB pool too small.
0108	0324		Invalid option 'L' or 'LS'.
0108	0328		Fast Path buffer fix error.

Table 138. Message Calls (continued)

Return Code (Hex)	Reason Code (Hex)	Message Calls	Description
0108	032C		Invalid processing intent.
0108	056C		Syncpoint failure. AIBERRXT contains SYNC return code.
0110	000C	AUTH	Resource specified was not authorized.
0110	0020		Program not authorized to RACF.
0110	0024		The user ID was not authorized to RACF.
0110	0028		Program not authorized to issue the program.
0110	002C		The user ID was not authorized to issue the program.
0110	0030		DFSCCMD0 indicated program was not authorized to issue command.
0110	0034		DFSCCMD0 indicated the user ID was not authorized to issue command.
0110	0038		ICMD call not authorized from any program (AOIS=N).
0110	003C		RACF not available for authorization check (AOIS=A|R).
0110	0040		DFSCCMD0 not available for authorization check (AOIS=A|C).
0110	0050		A CPI-C driven application issued an APSB call and the user ID is not authorized to RACF.
0110	0054		Command not authorized to RACF.
0110	0058		Command not authorized to be issued by the transaction.
0110	005C		DFSCCMD0 indicated that the command was not authorized to be issued by the transaction.

Table 138. Message Calls (continued)

Return Code (Hex)	Reason Code (Hex)	Message Calls	Description
0900		AUTH GU GN ISRT CHNG CMD GCMD PURG SETO	Reason code unmodified on 0900. PCB status code analysis required.

Table 139. System Service Calls

Return Code (Hex)	Reason Code (Hex)	System Service Calls	Description
0000	0000	APSB CHKP DPSB GMSG ICMD INIT INQY LOG RCMD ROLB ROLS SETS SETU SNAP[2] STAT[3] SYNC XRST	Call was completed successfully. Proceed.
0004	0004	GMSG ICMD RCMD	Segment returned to I/O area. This is the last segment.
0004	0014	GMSG	No more messages are available. No segment is returned.
0004	0018	GMSG RCMD	No more segments are available. No segment is returned.
0004	0048	GMSG	AO application waiting for AOI message was posted due to IMS system shutdown. No message segment returned.
0004	004C	GMSG	AO application waiting for AOI message was posted due to /PSTOP region command. No message segment is returned.
0100	000C	GMSG ICMD INQY RCMD	The output area was not large enough to contain all the data. Only partial data was returned.

Table 139. System Service Calls (continued)

Return Code (Hex)	Reason Code (Hex)	System Service Calls	Description
0104	020C	CHKP GMSG ICMD INIT INQY LOG RCMD ROLB ROLS SETS SETU SNAP[2] STAT[3] SYNC XRST	No PSB scheduled. Call before APSB.
0104	0204	APSB DPSB	No value specified for IMS DB ID in AIBRSNM2 field.
0104	0208	CHKP INIT INQY LOG ROLB ROLS SETS SETU SNAP[2] STAT[3] SYNC XRST	An invalid PCB name was passed in the AIB. (See note 4 on page 603).
0104	0210	GMSG ICMD INQY LOG RCMD SETS SETU	The output area length in the AIB was invalid. No data is returned.
0104	0218	GMSG INQY	Subfunction unknown or invalid.
0104	021C	GMSG	No AOI token specified in AIB on initial GMSG call.
0104	0220	GMSG	GMSG call with WAITAOI specified did not specify an AOI token.
0104	0224	GMSG	AOI token specified on GMSG call contained one or more invalid characters. AOI token may contain characters A-Z, 0-9, @, #, and $.
0104	0228	APSB DPSB	Invalid AIBLEN must be a minimum of 264 bytes.

Table 139. System Service Calls (continued)

Return Code (Hex)	Reason Code (Hex)	System Service Calls	Description
0104	022C	APSB	MAXTHRD value reached. Cannot allocate a thread.
0104	0404	APSB DPSB GMSG ICMD RCMD	Invalid function code.
0104	0440		Invalid call.
0104	0444		Invalid call from the specific environment.
0104	0448	INQY	Invalid call from CPI-C application.
0104	044C		Invalid call from DEP region type.
0104	0450	GMSG	No messages to retrieve. AO user exit DFSAOE00 does not exist.
0104	048C	APSB	APSB for PSB with no DPSB.
0104	0490	APSB DPSB	DPSB with no CPI-RR commit.
0104	0494	DPSB	PSB not allocated.
0104	054C		Invalid output destination.
0104	0550		DEALLOC_ABND issued for destination.
0104	060C		Invalid AUTH class name specified.
0104	0610	CHKP GMSG ICMD INIT INQY LOG RCMD ROLB ROLS SETS SETU SNAP[2] STAT[3] SYNC XRST	Required I/O area address parameter missing. No data is returned.
0104	0618	ICMD	I/O area length is longer than the PSB work area defined by the IOASIZE parameter on PSBGEN.
0104	0620	INQY SETS SETU	A ZZ field of I/O area not zero.

Table 139. System Service Calls (continued)

Return Code (Hex)	Reason Code (Hex)	System Service Calls	Description
0104	0754		The segment length is less than 5.
0104	0810		Required option list parameter is missing.
0104	0920		Queue Space Notification exit (DFSQSPC0) determined the application reached the limit of data that can be inserted to the message queue.
0104	1004	ICMD	Command as entered not allowed from an application.
0104	1008	ICMD	Invalid command verb specified in I/O area.
0104	1010	RCMD	ICMD call was not issued before RCMD call.
0108	0004	GMSG ICMD RCMD	Error encountered during PC router processing.
0108	0010	GMSG ICMD RCMD	Unable to obtain private storage.
0108	0014	GMSG ICMD RCMD	Unable to obtain global storage.
0108	0018	GMSG	Internal latch error. For GMSG call, no segment is returned.
0108	001C	APSB	ATTACH of the DRA TCB failed.
0108	0020	APSB	The LOAD of the required DRA module failed or startup table failed.
0108	0024	APSB	OPEN of the DRA execution library failed.
0108	0028	APSB	Dynamic allocation of the DRA execution library failed.
0108	002C	APSB	MVS Name/Token service failed.
0108	0030		Spool API data set CLOSE error.
0108	0034		Spool API data set deallocation (DYNALLOC) error.
0108	0038		Spool API data set allocation (DYNALLOC) error.

Table 139. System Service Calls (continued)

Return Code (Hex)	Reason Code (Hex)	System Service Calls	Description
0108	003C		Spool API data set OPEN error.
0108	0040		Spool API WRITE to data set error.
0108	0044		Spool API create output descriptor (OUTADD) error.
0108	0048		Spool API delete output descriptor (OUTDEL) error.
0108	0060	INQY	DFSLUMIF failure.
0108	0064	INQY	DFSYFND failure.
0108	0068	INQY	DFSYLUM failure.
0108	0080		RACINIT failure - LU 6.2 originated transaction.
0108	020C	ICMD	Invalid AWE encountered during command processing.
0108	0214	APSB	The DRA startup table (DFScccccc0) required parameters not specified correctly.
0108	0220		PST 62 extension was not found.
0108	0224		Security UTOKEN not found.
0108	0240	GMSG	Internal error. PST posted with invalid post code. No segment returned.
0108	0244	GMSG	PST posted during abnormal terminate thread processing. No segment returned.
0108	0304	APSB	PSB was not found.
0108	0308	APSB	PSB authorization failure.
0108	030C	APSB	PSB permanently bad.
0108	0310	APSB	Fast Path DB stopped/locked.
0108	0314	APSB	PSB already scheduled.
0108	0318	APSB	PSB stopped/locked.
0108	031C	APSB	I/O error reading PSB/DMB.
0108	0320	APSB	PSBW/DMB/PSB pool too small.
0108	0324	APSB	Invalid option 'L' or 'LS'.
0108	0328	APSB	Fast Path buffer fix error.
0108	032C	APSB	Invalid processing intent.

Table 139. System Service Calls (continued)

Return Code (Hex)	Reason Code (Hex)	System Service Calls	Description
0108	0494	DPSB	No PSB allocated because no valid PSB name is in AIBRSNM1 field.
0108	0540	APSB DPSB	No active communication with IMS DB.
0108	0544	APSB	RRS/MVS is not active. APSB call cannot be issued.
0108	0548	APSB	SWITCH_CONTEXT failed.
0108	054C	APSB	Database stopped for PSB.
0108	0550	APSB	The recovery token is not unique or the z/OS application region ID is invalid.
0108	0554	APSB DPSB	Recovery token passed is zeros.
0108	0558	APSB	SCHED failed by a /STOP REG command.
0108	0560	APSB	SCHED failed by a /STOP THREAD command.
0108	0564	APSB	SIGNON token not found.
0108	0568	APSB	Mismatch address space connection.
0110	000C		Resource specified was not authorized.
0110	0020	ICMD	Program not authorized to RACF.
0110	0024	ICMD	The user ID was not authorized to RACF.
0110	0028	ICMD	Program not authorized to issue the command.
0110	002C	ICMD	The user ID was not authorized to issue the command.
0110	0030	ICMD	DFSCCMD0 indicated program was not authorized to issue command.
0110	0034	ICMD	DFSCCMD0 indicated the user ID was not authorized to issue command.
0110	0038	ICMD	ICMD call not authorized from any program (AOIS=N).
0110	003C	ICMD	RACF not available for authorization check (AOIS=A|R).

Table 139. System Service Calls (continued)

Return Code (Hex)	Reason Code (Hex)	System Service Calls	Description
0110	0040	ICMD	DFSCCMD0 not available for authorization check (AOIS=A|C).
0110	0050	APSB	A CPI-C driven application issued an APSB call and the user ID is not authorized to RACF.
0110	0054	ICMD	Command not authorized to RACF.
0110	0058	ICMD	Command not authorized to be issued by the transaction.
0110	005C	ICMD	DFSCCMD0 indicated that the command was not authorized to be issued by the transaction.
0900	N/A	CHKP INIT INQY LOG ROLB ROLS SETS SETU SNAP[2] STAT[3] SYNC XRST	Reason code unmodified on 0900. PCB status code analysis required.

Notes:

1. GSCD is a Product-sensitive programming interface.
2. SNAP is a Product-sensitive programming interface.
3. STAT is a Product-sensitive programming interface.
4. When using the AIBTDLI interface for functions that do not require a PCB (such as APSB or GMSG), you can receive this return/reason code instead of X'0104'/X'0404'. You can also receive this return/reason code if the function is invalid and no PCB name is passed in the AIB.

DL/I Return and Reason Code Explanations

0000/0000

Explanation: Call was completed successfully.

For GMSG calls, there is at least one more segment to retrieve.

For ICMD calls, when the AIBOAUSE field is zero, no segment was returned and there are no more segments to retrieve. This can occur when the only response to the command is a DFS058 message indicating either COMMAND IN PROGRESS or COMMAND COMPLETE. When the AIBOAUSE field is nonzero, a segment was returned to the I/O area and there is at least one more segment to retrieve.

For RCMD calls, there is at least one more segment to retrieve.

Programmer Response: Proceed with processing. For GMSG, ICMD, and RCMD calls, you may issue another GMSG or RCMD call to retrieve the next segment.

0004/0004

Explanation: A message segment was returned to the I/O area. This is the last segment for the message or command response.

Programmer Response: Proceed with processing.

0004/0014

Explanation: No more messages are available for processing at this time. No segment is returned.

Programmer Response: You may want the AO application to terminate at this time.

0004/0018

Explanation: No more segments are available for this message or command response. No segment is returned.

Programmer Response: Process the message or command response previously returned.

0004/0048

Explanation: The AO application issued a GMSG call with the WAITAOI subfunction specified. While the AO application was waiting for an AOI message, the region was posted due to an IMS system shutdown. No message segment is returned.

Programmer Response: The AO program should terminate.

0004/004C

Explanation: The AO application issued a GMSG call with the WAITAOI subfunction. While the AO application was waiting for an AOI message, the region was posted due to a /PSTOP region command. No message segment is returned.

Programmer Response: The AO application should terminate.

00F0/Any

Explanation: An invalid call using the MRQPSB block was made by an application program that is not the QCF licensed product. The MRQPSB block can only be used by this product.

If the caller is the QCF product, then an error was detected in the call that was issued.

System Action: Call is terminated.

Programmer Response: Determine if the application program encountering the error is the QCF product. If not, use a PSB other than MRQPSB. If the program is QCF, locate the AIBREASN code and refer to the IMS DFSMRAEQ macro for information on QCF AIBREASN codes.

0100/000C

Explanation: The I/O area was too small to contain all the data; partial data was returned. The AIBOAUSE field contains the length required to receive all of the data. The AIBOALEN field contains the actual length of the data.

Programmer Response: For INQY calls, the call may be reissued with a larger I/O area to retrieve all of the output data. If the data being returned is a message segment resulting from an ICMD or RCMD call, you may reissue the ICMD call with a larger I/O area.

0104/020C

Explanation: A CPI-C driven application issued a DL/I call before a PSB was scheduled. The APSB call must be issued to schedule a PSB before issuing any other DL/I call.

Programmer Response: Correct the CPI-C driven application so that it issues an APSB call before issuing any other DL/I call.

0104/0204

Explanation: AIBRSNM2 did not contain the IMS/DBCTL DRA startup table suffix on an ODBA APSB or CIMS subfunction INIT or TERM call.

Programmer Response: Set AIBRSNM2 to the correct 1 to 4 character DRA startup table suffix before issuing the call.

0104/0208

Explanation: One of the following application programming errors occurred:

- An invalid PCB name was passed in the AIB for a DL/I call requiring a PCB.
- An invalid DL/I call function was specified, and the PCB name was either not specified or not found in the scheduled PSB.
- The program issued a valid DL/I call that does not use a PCB. However, the call is not supported in the caller's environment (for example, GMSG call in a batch environment).

Programmer Response: Correct the DL/I call in the program.

0104/0210

Explanation: The I/O area length in the AIB (AIBOALEN field) is zero or negative. A negative field may be caused by the application passing the length as a character string instead of binary data. No data is returned to the application.

Programmer Response: Correct the program to specify the correct I/O area length in the AIB.

0104/0218

Explanation: The subfunction specified in the AIB for the DL/I call was invalid.

Programmer Response: Correct the DL/I call in the program. Not all DL/I calls support subfunctions. Refer to the DL/I call documentation for a list of valid subfunctions for the call.

0104/021C

Explanation: The AOI token was not specified in the AIB (AIBRSNM1 field) on the initial GMSG call for a message. The first GMSG call issued by an AO application must specify an AOI token. The AOI token must contain blanks when the GMSG call is used to get subsequent segments of the current message.

Programmer Response: Correct the AO application to specify an AOI token on the initial GMSG call for a message.

0104/0220

Explanation: GMSG call with WAITAOI subfunction did not specify an AOI token. The WAITAOI subfunction may only be specified when retrieving the first segment of a message. The WAITAOI subfunction requires that an AOI token be specified in the AIB (AIBRSNM1 field).

Programmer Response: Correct the program to specify an AOI token on the initial GMSG call for a message.

0104/0224

Explanation: The AOI token specified on a GMSG call contained one or more invalid characters. An AOI token may contain characters A-Z, 0-9, @, #, and $.

Programmer Response: Correct the program so the AOI token uses only valid characters.

0104/0228

Explanation: The AIB length specified in AIBLEN is less than the minimum required length.

Programmer Response: Response: Insure that the AIB is >= 264 bytes and AIBLEN reflects the correct length.

0104/022C

Explanation: A new ODBA thread request (APSB) cannot be processed because the maximum number of threads are currently allocated. The call is not processed.

Programmer Response: Try your request again, otherwise contact your IMS system programmer.

0104/0300

Explanation: An IMS Java application attempted to issue a Java GU message prior to issuing a Java commit.

Programmer Response: Correct your IMS Java application to issue the required Java commit before issuing your next Java GU message.

0104/0404

Explanation: The function code specified on the DL/I call is unknown or invalid. The program may be coded incorrectly, or the program may be executing on a level of IMS that does not support the call.

Programmer Response: Make sure the call is coded correctly and that the level of IMS in which the program is executing supports the call function.

0104/0440

Explanation: A DL/I call that is only valid from a CPI-C driven application was issued by a nonCPI-C driven program.

Programmer Response: Correct the program so it either does not issue the call or executes as a CPI-C driven program.

0104/0444

Explanation: A DL/I call was issued that is only valid from the specific environment.

Programmer Response: Correct the program so it either does not issue the call or executes as a CPI-C driven program.

Correct the program so that it either doesn't issue the call or runs in the correct region type.

0104/0448

Explanation: A DL/I call that is only valid from a nonCPI-C driven program was issued by a CPI-C driven program. Some DL/I calls are allowed from CPI-C driven programs as long as the call does not use the I/O PCB.

Programmer Response: Correct the CPI-C driven program so that it either doesn't issue the call or uses an alternate PCB instead of the I/O PCB.

0104/044C

Explanation: A DL/I call was issued that is invalid from a specific dependent region type.

Programmer Response: Correct the program so that it either doesn't issue the call or runs in the correct region type.

0104/0450

Explanation: There are no messages to retrieve. The AO exit routine DFSAOE00 does not exist in the IMS system.

Programmer Response: The program should terminate. Contact your IMS system programmer to install DFSAOE00 in your system.

0104/0464

Explanation: An ODBA application issued a DL/I call before a PSB was scheduled. The APSB call must be issued to schedule a PSB before issuing any other call.

Programmer Response: Correct the ODBA application so that it issues an APSB call before issuing any other DL/I call.

0104/048C

Explanation: The CPI-C driven program attempted to allocate a PSB when one was already allocated. This can be caused when a CPI-C driven program does not issue a DPSB to deallocate the PSB allocated by a previous APSB call.

Programmer Response: Correct the program to issue a DPSB call.

0104/0490

Explanation: The CPI-C driven program tried to either allocate or deallocate a PSB without committing resources affected by a previous DL/I or SQL call. When DL/I or SQL calls are issued from a CPI-C driven program, a CPI-RR commit (SRRCMIT) call must be issued to commit the resources before the PSB can be deallocated.

Programmer Response: Correct the program to issue either a CPI-RR commit or backout for the resources before issuing the DPSB call.

0104/0494

Explanation: The CPI-C driven program or ODBA application tried to deallocate a PSB, but the PSB was not allocated. Either there was no PSB allocated or the PSB that was allocated was not the same PSB specified on the DPSB call. The error may be caused by one of the following situations:

- Multiple DPSB calls are issued without intervening APSB calls.
- DPSB call is issued after an APSB call fails.
- DPSB call is issued with an incorrect PSB name.
- AIBRSNM2 does not contain the PSB name.

Programmer Response: Correct the program to issue one DPSB call for each APSB call, and ensure the PSB names are the same on both calls.

0104/054C

Explanation: The DL/I call specified an invalid message queue destination. The error may be caused by one of the following situations:

- The destination is a dynamic terminal but ETO is not activated.
- The program specified the wrong destination name on a CHNG call.
- The LTERM name defined on an alternate PCB is incorrect.

Programmer Response: Correct the program.

0104/0550

Explanation: The program attempted to insert data to the message queue when a DEALLOCATE_ABEND call was previously issued for the destination. Additional ISRT or SETO calls for this destination are rejected until an application sync point is processed.

The error can also be caused when a SETO DEALLOCATE_ABEND call is issued but there were no previous inserts for the destination.

Programmer Response: Analyze the program to determine if the insert logic is in error. A GU or CHKP call may be issued as appropriate to trigger an application sync point and retrieve the next input message; this will allow further inserts to the destination. CPI-C driven programs may issue a CPI-RR commit request to trigger sync point processing.

0104/0560

Explanation: A routing request error occurred because of one of the following reasons:

- The DFSCMPR0 user routing exit requested an invalid routing request and the CHNG call was rejected.
- The DFSMSCE0 user routing exit requested an invalid routing request and the CHNG or ISRT call was rejected.
- IMS encountered an error while processing the message routing request.

Programmer Response: If the DFSMSCE0 is being used, look for a DFS070 routing error message and a 6701–MSCE LOGREC. If no error message or LOGREC is issued, use the exit trace (/TRA SET ON EXIT DFSMSCE0 PRCH/PRIS) to determine the routing error.

If the DFSCMPR0 is being used, use the transaction trace (/TRA SET ON TRANSACTION trancode) to determine the routing error.

Refer to *IMS Version 9: Diagnosis Guide and Reference* for information on routing exit errors and for printing and reading the exit trace.

0104/0564

Explanation: Either the DFSCMPR0 user routing exit rejected the CHNG call, or the DFSMSCE0 user exit rejected the CHNG or ISRT call. An A1 DL/I status code is set.

Programmer Response: Refer to the DFSCMPR0 or DFSMSCE0 user exit. See *IMS Version 9: Customization Guide* for information on how this error is set.

0104/0568

Explanation: The DFSMSCE0 user routing exit rejected the CHNG or ISRT call with a U3303 user abend.

Programmer Response: Refer to the DFSMSCE0 user exit. See *IMS Version 9: Customization Guide* for information on how this error is set.

0104/056C

Explanation: The DFSMSCE0 user routing exit rejected the CHNG or ISRT call with an A4 DL/I status code.

Programmer Response: Refer to the DFSMSCE0 user exit. See *IMS Version 9: Customization Guide* for information on how this error is set.

0104/0570

Explanation: The DFSMSCE0 user routing exit rejected the CHNG or ISRT call with an E1 user exit status code.

Programmer Response: Refer to the DFSMSCE0 user exit. See *IMS Version 9: Customization Guide* for information on how this error is set.

0104/0574

Explanation: The DFSMSCE0 user routing exit rejected the CHNG or ISRT call with an E2 user exit status code.

Programmer Response: Refer to the DFSMSCE0 user exit. See *IMS Version 9: Customization Guide* for information on how this error is set.

0104/0578

Explanation: The DFSMSCE0 user routing exit rejected the CHNG or ISRT call with an E3 user exit status code.

Programmer Response: Refer to the DFSMSCE0 user exit. See *IMS Version 9: Customization Guide* for information on how this error is set.

0104/057C

Explanation: A routing request error occurred because of one of the following reasons:

- The DFSCMPR0 user routing exit requested to override a direct routing request and the CHNG call was rejected.
- The DFSMSCE0 user routing exit requested to override a direct routing request and the CHNG or ISRT call was rejected.
- IMS encountered an error while processing the message routing request.

A QH or XF DL/I status code is set. See "DL/I Status Codes" on page 614 for information on these codes.

Programmer Response: If the DFSMSCE0 is being used, look for a DFS070 routing error message and a 6701–MSCE LOGREC. If no error message or LOGREC is issued, use the exit trace (/TRA SET ON EXIT DFSMSCE0 PRCH/PRIS) to determine the routing error.

If the DFSCMPR0 is being used, use the transaction trace (/TRA SET ON TRANSACTION trancode) to determine the routing error.

Refer to *IMS Version 9: Diagnosis Guide and Reference* for information on routing exit errors and for printing and reading the exit trace.

0104/060C

Explanation: An invalid class name was specified in the I/O area on the AUTH call. Refer to the AUTH call documentation in the Application Programming Transaction manager for a list of valid classes.

Programmer Response: Correct the program.

0104/0610

Explanation: The I/O area address was not specified in the call list. No data is returned to the program.

Programmer Response: Correct the program to specify the I/O area address in the call list.

0104/0618

Explanation: The I/O area length is longer than the PSB work area defined by the IOASIZE parameter on PSBGEN. IMS is not able to copy the contents of the I/O area to the PSB work area.

Programmer Response: Make sure that the I/O area length specified in the AIB (AIBOALEN field) is correct and is not larger than the size specified in the IOASIZE parameter of the PSB.

0104/0620

Explanation: The ZZ field of the I/O area is not zero. The program must not use the ZZ field in the I/O area.

Programmer Response: Correct the program.

0104/0754

Explanation: The LL field of the I/O area is less than 5. The length of the segment, excluding the LLZZ field, must be at least 1, and LL must be at least 5.

Programmer Response: Correct the program.

0104/0810

Explanation: The option list parameter was not specified in the call list.

Programmer Response: Correct the program.

0104/0920

Explanation: The Queue Space Notification exit (DFSQSPC0) determined that the program reached its limit of data that can be inserted to the message queue. The program may be in a loop inserting information to the IMS message queues. Additional ISRT or SETO calls for this destination are rejected until an application sync point is processed.

Programmer Response: Analyze the program to determine if the insert logic is in error. A GU or CHKP call may be issued as appropriate to initiate an application sync point and retrieve the next input message; this will allow further inserts to the destination. CPI-C driven programs may issue a CPI-RR commit request to initiate sync point processing.

0104/1004

Explanation: A valid IMS command was specified in the I/O area of an ICMD call; however, the command as specified is not allowed from an application. For a list of commands that may be specified from an AO application, see *IMS Version 9: Command Reference*.

Programmer Response: Correct the AO application so only valid automated operator commands are issued.

0104/1008

Explanation: An invalid command verb was specified in the I/O area.

Programmer Response: Correct the AO application.

0104/1010

Explanation: The AO application issued an RCMD call; however, there were no command response segments to retrieve since the AO application had not issued a prior ICMD call. The AO application must issue an IMS command through the ICMD call before the RCMD call is valid.

Programmer Response: Correct the AO application.

0108/0004

Explanation: An error was encountered during PC router processing. This is a system error.

Programmer Response: Contact your IMS system programmer.

0108/0010

Explanation: A storage allocation request failed to obtain private storage. The call is not processed. This is a system error.

0108/0014

Explanation: A storage allocation request failed to obtain global storage. The call is not processed. This is a system error.

Programmer Response: Contact your IMS system programmer.

0108/0018

Explanation: IMS encountered an internal latch error. For GMSG calls, no segment is returned.

Programmer Response: Contact your IMS system programmer.

0108/001C

Explanation: During the processing of an ODBA CIMS AIBSFUNC=INIT or APSB call, the attach of an ODBA TCB failed in the Application address space. The call is not processed. This is a system error.

Programmer Response: Contact your IMS system programmer.

0108/0020

Explanation: The load of a required DRA module or load of the DRA startup table (DFScccc0) failed in the Application address space. The name is returned to the calling program in AIBRSNM2.

Programmer Response: Insure that the named module is linked into the proper library.

0108/0024

Explanation: The OPEN of the DRA library specified in the DRA startup table failed.

Programmer Response: Insure the library specified in the DRA startup table (DFScccc0) is correct and accessible, otherwise contact your IMS system programmer.

0108/0028

Explanation: Dynamic allocation of the DRA execution library (DSNAME=DRA startup table) failed. The call is not processed. This is a system error.

Programmer Response: If the DSNAME= library is correct, contact your IMS system programmer.

0108/002C

Explanation: ODBA encountered a z/OS Name/Token Service error in the Application address space. The call is not processed. This is a system error.

Programmer Response: Contact your IMS system programmer.

0108/0030

Explanation: During Spool API processing, a data set CLOSE error was encountered. A X'67D0' log record was written to indicate the cause of the failure.

Programmer Response: Contact your IMS system programmer to determine the reason for the CLOSE error.

0108/0034

Explanation: During Spool API processing, a data set deallocation (DYNALLOC) error was encountered. A X'67D0' log record was written to indicate the cause of the failure.

Programmer Response: Contact your IMS system programmer to determine the reason for the DYNALLOC error.

0108/0038

Explanation: During Spool API processing, a data set allocation (DYNALLOC) error was encountered. A X'67D0' log record was written to indicate the cause of the failure.

Programmer Response: Contact your IMS system programmer to determine the reason for the DYNALLOC error.

0108/003C

Explanation: During Spool API processing, a data set OPEN error was encountered. A X'67D0' log record was written to indicate the cause of the failure.

Programmer Response: Contact your IMS system programmer to determine the reason for the OPEN error.

0108/0040

Explanation: During Spool API processing, an error was encountered while trying to write to the data set. A X'67D0' log record was written to indicate the cause of the failure.

Programmer Response: Contact your IMS system programmer to determine the reason for the write error.

0108/0044

Explanation: During Spool API processing, an error was encountered while trying to create an output descriptor (OUTADD). A X'67D0' log record was written to indicate the cause of the failure.

Programmer Response: Contact your IMS system programmer to determine the reason for the OUTADD error.

0108/0048

Explanation: During Spool API processing, an error was encountered while trying to delete an output descriptor (OUTDEL). A X'67D0' log record was written to indicate the cause of the failure.

Programmer Response: Contact your IMS system programmer to determine the reason for the OUTDEL error.

0108/0060

Explanation: During call processing, IMS issued a DFSLUMIF call which failed. This is a system error. A X'67D0' log record was written to indicate the cause of the failure.

Programmer Response: Contact your IMS system programmer.

0108/0064

Explanation: During call processing, IMS issued a DFSYFND call which failed. This is a system error. A X'67D0' log record was written to indicate the cause of the failure.

Programmer Response: Contact your IMS system programmer.

0108/0068

Explanation: During call processing, IMS issued a DFSYLUM call which failed. This is a system error. A X'67D0' log record was written to indicate the cause of the failure.

Programmer Response: Contact your IMS system programmer.

0108/0070

Explanation: The execution library specified in the DRA startup table (DSNAME=) is not authorized.

Programmer Response: Contact your IMS system programmer.

0108/0080

Explanation: A RACF RACINIT failure occurred for an LU 6.2 originated transaction. An ACEE could not be created for the authorization check for the AUTH call.

Programmer Response: Contact your IMS system programmer.

0108/020C

Explanation: While processing the IMS command issued by an AO application, the command processor encountered an invalid AWE.

Programmer Response: Contact your IMS system programmer.

0108/0214

Explanation: A DRA startup table parameter is incorrectly specified. AIBERRXT contains information regarding the error as follows:

- 'MnMx' = MinThrd or MaxThrd is not between 1 and 255.
- 'FPB ' = FPBUF or FPBOF is not between 0 and 999.
- 'CNBA' = CNBA is less than FPBUF.
- The call is not processed

Programmer Response: Correct and rebuild the DRA startup table.

0108/0220

Explanation: The PST LU 6.2 extension address is zero. This address, obtained during message GU processing, is required to obtain the user token for an LU 6.2 originated transaction.

Programmer Response: Contact your IMS system programmer.

0108/0224

Explanation: The user security token (UTOKEN) is zero. The UTOKEN is obtained during the message GU processing and is required to build the ACEE for the authorization check for an LU 6.2 originated transaction.

Programmer Response: Contact your IMS system programmer.

0108/0240

Explanation: The dependent region was posted with an invalid post code. No segment is returned. This is a system error.

Programmer Response: Contact your IMS system programmer.

0108/0244

Explanation: The dependent region was posted unexpectedly during abnormal terminate thread processing. No segment is returned. This is a system error.

Programmer Response: Contact your IMS system programmer.

0108/0304

Explanation: The application attempted to allocate a PSB that IMS could not find. The application program may have specified an incorrect PSB name, or the PSB may not have been generated in the IMS system.

Programmer Response: Analyze the application program to determine if the cause of the error is the PSB. If the PSB name is correct, make sure the PSB is defined to the IMS system.

0108/0308

Explanation: IMS encountered a PSB authorization failure while attempting to allocate the PSB. Security checking used either the application group name (AGN) table (if ISIS=1 or 2) or used resource access security (RAS) (if ISIS=R and/or C). If AGN was used, then either the AGN Table did not exist or the PSB name was not defined in the table. If RAS was used, then either RACF (or equivalent product) or the user exit DFSRAS00 indicated that the PSB was not authorized for this dependent region.

Programmer Response: Contact your IMS system programmer to determine if the AGN table exists in the IMS system and to ensure the PSB is defined in it.

0108/030C

Explanation: The program attempted to allocate a PSB that is marked permanently bad. IMS cannot allocate the PSB.

Programmer Response: Contact your IMS system programmer.

0108/0310

Explanation: The PSB cannot be allocated due to a stopped or locked database.

Programmer Response: Determine why the database is stopped or locked. If appropriate, the IMS commands /START and /UNLOCK can be used to change the state of the database.

0108/0314

Explanation: The PSB could not be allocated since it was already scheduled and it does not support parallel scheduling.

Programmer Response: If the PSB should support parallel scheduling, contact your IMS system programmer to make sure the APPLCTN macro specifies SCHDTYP=PARALLEL for the PSB.

0108/0318

Explanation: The PSB could not be allocated since it is stopped or locked.

Programmer Response: Determine why the PSB is stopped or locked. If appropriate, the IMS commands /START and /UNLOCK can be used to change the state of the PSB.

0108/031C

Explanation: An I/O error was encountered while reading the PSB or DMB.

Programmer Response: Contact your IMS system programmer.

0108/0320

Explanation: Either the PSBW pool is too small for the PSB or the DLDP pool is too small for the DMB.

Programmer Response: Contact your IMS system programmer.

0108/0324

Explanation: The PSB was generated with a PROCOPT of L or LS in a non-HSAM PCB.

Programmer Response: Contact your IMS system programmer.

0108/0328

Explanation: During PSB allocation, a Fast Path buffer fix error was encountered.

Programmer Response: Contact your IMS system programmer.

0108/032C

Explanation: During PSB allocation, an invalid processing intent was encountered.

Programmer Response: Contact your IMS system programmer.

0108/0540

Explanation: No active communications with IMS or DBCTL. The call is not processed.

Programmer Response: Contact your IMS system programmer.

0108/0544

Explanation: RRS/MVS is not active at the time that ODBA attempts to establish a connection to IMS or DBCTL. RRS/MVS is required for ODBA. The call is not processed.

Programmer Response: Contact your IMS system programmer.

0108/0548

Explanation: The SWITCH_CONTEXT call failed during ODBA APSB call processing. The call is not processed. This is a system error.

Programmer Response: Contact your IMS system programmer.

0108/054C

Explanation: A pseudoabend U0458 was returned on an ODBA APSB call. One of the Fast Path databases used by the PSB named in AIBRSNM1 was stopped or locked by a prior program failure. The call is not processed.

Programmer Response: Determine the reason for the Fast Path database being stopped. After the problem that caused the database to be stopped has been corrected, resubmit the request.

0108/0550

Explanation: The recovery token is not unique or the z/OS Application address space ID is invalid. The call is not processed. This is a system error.

Programmer Response: Contact your IMS system programmer.

0108/0554

Explanation: The recovery token is zero. The call is not processed. This is a system error.

Programmer Response: Contact your IMS system programmer.

0108/0558

Explanation: An ODBA APSB schedule failed for a /STOP REGION command. The call is not processed.

Programmer Response: None.

0108/0560

Explanation: An ODBA APSB schedule failed for a /STOP REGION ABDUMP command. The call is not processed.

Programmer Response: None.

0108/0564

Explanation: A pseudoabend U0141 was received on an ODBA APSB request. The call is not processed. This is a system error.

Programmer Response: Contact your IMS system programmer.

0108/0568

Explanation: A pseudoabend U0145 was received on an ODBA APSB request. The call is not processed. This is a system error.

Programmer Response: Contact your IMS system programmer.

0110/000C

Explanation: The user is not authorized for access to the resource name in the class requested in the AUTH call. No 'installation data' is returned.

Programmer Response: Check the program to ensure the authorization check was performed on the correct resource. If it was, check with the person who handles security in your installation to determine whether RACF authorization is required for the resource.

0110/0020

Explanation: An AO application tried to issue an IMS command. Security checking determined that the AO application is not authorized to RACF.

Programmer Response: Contact your RACF administrator to authorize your AO application to RACF.

Programmer Response: Contact your IMS system programmer to authorize your AO application to RACF.

0110/0024

Explanation: An AO application tried to issue an IMS command. Security checking determined that the user ID is not authorized to RACF.

Programmer Response: Contact your RACF administrator to authorize your user ID to RACF.

0110/0028

Explanation: An AO application tried to issue an IMS command. Security checking determined that the AO application is not authorized to issue the command.

Programmer Response: Contact your IMS system programmer.

0110/002C

Explanation: An AO application tried to issue an IMS command. Security checking determined that the user ID is not authorized to issue the command.

Programmer Response: Contact your IMS system programmer.

0110/0030

Explanation: An AO application tried to issue an IMS command. The Command Authorization exit routine (DFSCCMD0) indicated that the program was not authorized to issue the command.

Programmer Response: Contact your IMS system programmer to determine why DFSCCMD0 does not recognize your AO application.

0110/0034

Explanation: An AO application tried to issue an IMS command. The Command Authorization exit routine (DFSCCMD0) indicated the user ID was not authorized to issue the command.

Programmer Response: Contact your IMS system programmer to determine why DFSCCMD0 does not recognize your user ID.

0110/0038

Explanation: An AO application tried to issue an IMS command. The ICMD call is not authorized from any program because the IMS execution parameter AOIS= was specified as N.

Programmer Response: Contact your IMS system programmer to have the AOIS= execution parameter changed to allow commands from an AO application.

0110/003C

Explanation: An AO application tried to issue an IMS command. RACF is not available for the authorization check. The IMS execution parameter AOIS= was specified as either A or R.

Programmer Response: Contact your IMS system programmer to determine why RACF is not available to the IMS system.

0110/0040

Explanation: An AO application tried to issue an IMS command. The Command Authorization exit routine (DFSCCMD0) is not available for the authorization check. The IMS execution parameter AOIS= was specified as either A or C.

Programmer Response: Contact your IMS system programmer to determine why DFSCCMD0 was not included in the IMS system.

0110/0044

Explanation: An AO application program tried to issue an IMS command. Security checking determined that the transaction is not authorized to RACF.

Programmer Response: Contact your RACF administrator to authorize your transaction to RACF.

0110/0048

Explanation: An AO application program tried to issue an IMS command. Security checking determined that the transaction is not authorized to issue the command.

Programmer Response: Contact your IMS system programmer.

0110/004C

Explanation: An AO application program tried to issue an IMS command. The Command Authorization exit routine (DFSCCMD0) indicated the transaction was not authorized to issue the command.

Programmer Response: Contact your IMS system programmer to determine why DFSCCMD0 does not recognize your transaction.

0110/0050

Explanation: A CPI-C driven application issued an APSB call. IMS determined that the user ID is not authorized by RACF (or equivalent) to use the PSB. Field AIBERRXT of the AIB contains additional information as follows (see the RACF manual, *External Security Interface (RACROUTE) Macro Reference for MVS and VM* for a description of the codes in AIBERRXT, if you use RACF):

- Bytes 0 to 1 - SAF return code
- Byte 2 - RACF or installation exit return code
- Byte 3 - RACF or installation exit reason code

Programmer Response: Contact your Security administrator to authorize your user ID to use the PSB.

0110/0054

Explanation: An AO application program tried to issue an IMS command. Security checking determined that the command is not authorized to RACF as a user ID.

Programmer Response: Contact your RACF Administrator to authorize your command to RACF.

0110/0058

Explanation: An AO application program tried to issue an IMS command. Security checking determined that the command is not authorized to RACF to be issued by the transaction.

Programmer Response: Contact your IMS system programmer.

0110/005C

Explanation: An AO application program tried to issue an IMS command. The Command Authorization exit routine (DFSCCMD0) indicated the command was not authorized to be issued by the transaction.

Programmer Response: Contact your IMS system programmer to determine why DFSCCMD0 does not recognize your command.

0900

Explanation: The DL/I call, which requires a PCB for processing, encountered an error during processing. The cause of this error does not currently have a unique AIB return and reason code defined. The AIB (AIBRSA1 field) contains the PCB address. You must analyze the status code in the PCB to determine the cause of the error. The reason code is not modified when the return code is 0900.

Programmer Response: IMS intends to define unique AIB return and reason codes for most if not all DL/I call processing errors. The error that causes a X'0900' return code may become a unique return and reason code in the future.

DL/I Status Codes

This topic contains reference information on all IMS status codes.

The following topics provide additional information:

- “Status Code Tables”
- “DL/I Return and Reason Code Explanations” on page 603

Status Code Tables

The status code tables briefly explain each status code and list the calls for which you can receive each status code. The tables also include a column of numbers representing the category of each status code; the numbers and the corresponding explanations are below.

For information about each of the status codes, see Table 140, Table 141 on page 619, and Table 142 on page 622.

Exception: Although the APSB, DPSB, and ROLL calls are included in Table 142 on page 622, they do not receive status codes.

Categories of DL/I Status Codes

The numbers in the category column of the status codes tables refer to the following categories of status codes:

1. Those indicating exceptional but valid conditions. The call is completed.
2. Those indicating warning or information-only status codes on successful calls (for example, GA and GK). If the call requested data, IMS returns the data to the I/O area. The call is completed.
3. Those indicating warning status codes on successful calls when data is not returned to the I/O area. The call is completed.
4. Those indicating improper user specifications. Most status codes are in this category. The call is not completed.
5. Those indicating system, I/O, or security errors encountered during the execution of I/O requests. The call is not completed.
6. Those indicating unavailable data.

Table 140. Database Calls

PCB Status Code	CLSE (GSAM)	DEQ	GU, GHU	GN, GHN	GNP, GHNP	DLET, REPL	ISRT (LOAD)	ISRT (ADD)	FLD	POS	OPEN (GSAM)	QUERY	REFRESH	TERM	Category	Description
AB		X	X	X	X	X	X	X	X	X			X		4	Segment I/O area required; none specified in call. Only applies to full-function DEQ calls.
AC			X	X	X	X	X	X							4	Hierarchic error in SSAs.
AD		X	X	X	X	X	X	X	X	X			X		4	Function parameter incorrect. Only applies to full-function DEQ calls.
AF			X	X											4	GSAM detected invalid variable-length record.
AG										X					4	Unqualified POS I/O area too small.

Table 140. Database Calls (continued)

PCB Status Code	CLSE (GSAM)	DEQ	GU, GHU	GN, GHN	GNP, GHNP	DLET, REPL	ISRT (LOAD)	ISRT (ADD)	FLD	POS	OPEN (GSAM)	QUERY	REFRESH	TERM	Category	Description
AH							X	X							4	Required SSA missing. Options list not specified in SETO call.
AI			X	X	X	X	X	X							5	Data management OPEN error.
AJ		X	X	X	X	X	X	X	X						4	Incorrect parameter format in I/O area; incorrect SSA format; incorrect command used to insert a logical child segment. I/O area length in AIB is invalid; incorrect class parameter specified in Fast Path Q command code.
AK			X	X	X		X	X	X	X					4	Invalid SSA field name.
AM			X	X	X	X	X	X	X	X					4	Call function not compatible with processing option, segment sensitivity, transaction code, definition, or program type.
AO			X	X	X	X	X	X		X					5	I/O error: OSAM, BSAM, or VSAM.
AT						X	X	X							4	User I/O area too long.
AU			X	X	X	X	X	X							4	SSAs too long.
BA			X	X	X	X		X							6	Call could not be completed because data was unavailable.
BB			X	X	X	X		X							6	Call could not be completed because data was unavailable and updates are backed out only since the last commit point.
BC		X													6	Call could not be completed because of a deadlock occurrence; updates are backed out only since the last commit point.
DA						X			X						4	Segment key field or nonreplaceable field has been changed.
DJ						X									4	No preceding successful GHU or GHN call or an SSA supplied at a level not retrieved.
DX						X									4	Violated delete rule.
EM										X						Normally for a utility.

Table 140. Database Calls (continued)

PCB Status Code	CLSE (GSAM)	DEQ	GU, GHU	GN, GHN	GNP, GHNP	DLET, REPL	ISRT (LOAD)	ISRT (ADD)	FLD	POS	OPEN (GSAM)	QUERY	REFRESH	TERM	Category	Description
FA			X						X						4	MSDB arithmetic overflow error occurred.
FC										X					4	POS call for direct dependent segments only.
FD			X	X	X	X	X	X	X						2	Deadlock occurred.
FE									X						4	FSA error, not field name.
FF								X							3	No space in MSDB.
FG									X						4	Combination of FE and FW codes.
FH			X	X	X	X	X	X		X					3	DEDB inaccessible.
FI			X	X	X	X	X	X		X					4	I/O area not in user's dependent region.
FM			X	X	X		X	X		X					4	Randomizing routine return code = 4.
FN									X						4	FSA error, field name.
FP						X		X	X						4	Invalid hexadecimal or decimal data.
FR			X	X	X	X	X	X	X	X					5	Total buffer allocation exceeded.
FS							X								3	DEDB areas are full.
FT			X	X	X	X	X			X					4	Too many SSAs on call.
FV									X						3	MSDB verify condition failed.
FW		X	X	X	X	X	X	X	X	X					2	More resources needed than normally allowed. For the DEQ call, Fast Path was not able to release any buffers.
FY			X	X	X	X	X	X	X	X					4	Attempt to read sequential data preceding the current position.
GA				X	X										2	Crossing hierarchical boundary.
GB				X											1	End of database.
GC			X	X			X			X					3	Crossing unit of work (UOW) boundary.
GD								X							1	Call did not have SSAs for all levels above insert and has lost segment position.
GE			X	X	X			X							1	Segment not found.
GG			X	X	X										5	Segment contains invalid pointer.
GK				X	X										2	Crossing segment boundaries on same level.

Table 140. Database Calls (continued)

PCB Status Code	CLSE (GSAM)	DEQ	GU, GHU	GN, GHN	GNP, GHNP	DLET, REPL	ISRT (LOAD)	ISRT (ADD)	FLD	POS	OPEN (GSAM)	QUERY	REFRESH	TERM	Category	Description
GL		X													4	Invalid user log code. Only applies to full-function DEQ calls.
GP					X			X		X					4	No parentage established.
HT										X						Normally for a utility.
II								X							3	Segment already exists.
IX								X							4	Violated insert rule.
L2								X							1	The area lock failed.
LB							X								1	Segment being loaded already exists in database.
LC							X								4	Key field of segments out of sequence.
LD							X								4	No parent for this segment has been loaded.
LE							X								4	Sequence of sibling segments not the same as DBD sequence.
LF							X								4	An attempt was made to load a logical child segment in either a HALDB PHDAM or PHIDAM database.
LS								X							1	Work may be backed out because sufficient CI space was not preallocated for the area, or the SDEP CI lock failed.
NA												X	X		6	A database was unavailable.
NE						X									3	DL/I call issued by index maintenance cannot find segment.
NI						X	X	X							1	Index maintenance found duplicate segments in the index or it detected an index maintenance open error.
NO						X	X	X							5	I/O error: OSAM, BSAM, or VSAM.
NU												X	X		6	A database was unavailable for update.
OS										X						Normally for a utility.
RX						X									4	Violated replace rule.
TH												X			4	No PSB was scheduled (command-level only).

Table 140. Database Calls (continued)

PCB Status Code	CLSE (GSAM)	DEQ	GU, GHU	GN, GHN	GNP, GHNP	DLET, REPL	ISRT (LOAD)	ISRT (ADD)	FLD	POS	OPEN (GSAM)	QUERY	REFRESH	TERM	Category	Description
TI								X							4	Invalid path to segment (command-level only).
			X	X	X	X		X						X	5	DL/I not active (command-level only).
			X	X	X	X	X	X							5	Invalid system DIB (command-level only).
TO						X									4	Path replace error (command-level only).
TP			X	X	X	X	X	X							4	Invalid number for PCB or invalid processing option (command-level only).
TR		X	X	X	X	X		X		X				X	4	CICS XDLIPRE user exit determined the preceding request should not be executed.
TY			X	X	X	X	X	X							5	Database not open (command-level only).
TZ			X	X	X	X		X			X				5	Length of segment greater than 64 KB.
UC							X								1	Checkpoint taken (Utility Control Facility (UCF) status code).
US							X								1	Stop (UCF status code).
UX							X								1	Checkpoint and stop (UCF status code).
V1						X	X	X							4	Segment length not within limits of DBDGEN.
V2			X	X	X	X	X	X			X			X	4	Segment length invalid (command-level only).
V3			X	X	X			X							4	Field length missing or invalid (command-level only).
V4			X	X	X	X	X	X							4	Length of variable-length segment invalid (command-level only).
V5			X	X	X	X		X							4	Offset if invalid (command-level only).
V6			X	X	X	X		X							4	Concatenated key length invalid (command-level only).
XX			X	X			X	X							5	Internal GSAM error.
bb[1]	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	No status code returned. Proceed.

Note:

1. bb indicates blank.

Table 141. Message Calls

PCB Status Code	AUTH	GU	GN	ISRT	CHNG	CMD	GCMD	PURG	SETO	Category	Description
AA				X	X					4	CHNG call for alternate response PCB can specify only logical terminal destination; transaction code destination specified.
AB	X	X	X	X	X	X	X			4	Segment I/O area required; none specified in call.
AD		X	X	X	X	X	X	X	X	4	Function parameter invalid.
AH									X	4	Required SSA missing. Options list not specified in SETO call.
AJ									X	4	Invalid parameter format in I/O area; invalid SSA format; invalid command used to insert a logical child segment. I/O area length in AIB is invalid.
AL	X	X	X	X	X	X	X	X		4	Call using I/O PCB in batch program.
AP	X	X	X	X	X	X	X	X		4	Specifying more than four user call parameters for a TP PCB is not valid.
AR					X				X	4	Error in option list related to IMS option keyword.
AS					X				X	4	The PRTO= option contained invalid data set processing options.
AT	X			X				X		4	User I/O area too long.
AX	X			X	X				X	5	System error. Call not completed successfully.
AY				X						4	Alternate response PCB referenced by ISRT call has more than one physical terminal assigned for input purposes. Notify master terminal operator.
AZ								X		4	The conversational program has issued a PURG call to PCB that cannot be purged.
A1	X			X	X					4	AUTH call attempted with invalid generic class name or error occurred during attempt to set destination name specified in the CHNG or ISRT call.
A2					X					4	Call attempted with invalid PCB (PCB not modifiable or ISRT operation already done).
A3				X				X		4	Call attempted to a modifiable TP PCB with no destination set.
A4	X			X	X					4	Security violation detected during processing of either an AUTH call, a CHNG call, or an ISRT on a conversational response.
A5				X				X		4	Format name specified on second or subsequent message ISRT or PURG.
A6				X						4	Output segment size limit exceeded on call.
A7				X						4	Number of output segments inserted exceeded the limit by one. Any further queue manager calls are prohibited to prevent message queue overflow.
A8				X						4	ISRT to alternate response PCB followed ISRT to I/O PCB or vice versa.
A9				X						4	Alternate response PCB referenced by call requires that the source physical terminal receive the output response.
CA						X				4	No such command. No command responses produced.

Table 141. Message Calls (continued)

PCB Status Code	AUTH	GU	GN	ISRT	CHNG	CMD	GCMD	PURG	SETO	Category	Description
CB						X				4	Command, as entered, not allowed for AOI. No command responses produced.
CC						X				2	Command executed. One or more command responses produced.
CD						X				4	Entered command violates security. No command responses produced.
CE		X								2	Transaction rescheduled after CMD call. Commit point had not been reached.
CF		X								2	Message on queue before IMS was last started.
CG		X								2	Transaction originated from AOI exit routine.
CH						X				5	AOI detected system error; CMD request not processed. Reissue CMD call.
CI		X								2	Transaction on queue before IMS last started. Transaction rescheduled. Commit point not reached.
CJ		X								2	Transaction from AOI exit routine. Message rescheduled. Commit point not reached.
CK		X								2	Transaction from AOI exit routine. Message on queue before IMS last started.
CL		X								2	Transaction from AOI exit routine. Message on queue before IMS last started. Message rescheduled. Commit point had not been reached.
CM						X				3	Command executed. No command response produced.
CN						X				4	IOASIZE= parameter on PSBGEN macro does not meet minimum requirement for CMD call.
CR		X								4	Application error during GU message processing for an IMS Java application.
E1				X	X					4	The DFSMSCE0 user routing exit rejected the CHNG or ISRT call.
E2				X	X					4	The DFSMSCE0 user routing exit rejected the CHNG or ISRT call.
E3				X	X					4	The DFSMSCE0 user routing exit rejected the CHNG or ISRT call.
FF		X								3	No space in MSDB.
FH		X								3	DEDB inaccessible.
FI			X	X	X					4	I/O area not in user's dependent region.
FS		X								3	DEDB areas are full.
FV		X								3	MSDB verify condition failed.
MR		X	X	X		X	X	X		4	Error detected by the Queue Control Facility (QCF) routines.
QC		X								3	No more input messages exist.
QD			X				X			3	No more segments exist for this message.
QE			X				X			4	GN request before GU. GCMD request before CMD.

Table 141. Message Calls (continued)

PCB Status Code	AUTH	GU	GN	ISRT	CHNG	CMD	GCMD	PURG	SETO	Category	Description
QF		X		X				X	X	4	Segment less than five characters (segment length is message text length plus four control characters). (Non-shared Queues)
				X							Shared Queues are full. (Shared Queues)
QH				X	X			X	X	4	Terminal symbolic error; output designation unknown to IMS (logical terminals or transaction code). Either the message segment LL is not at least 5 bytes or the destination name in I/O area is blank or invalid.
TG	X									4	No PSB was scheduled (command-level only).
	X									5	Invalid system DIB (command-level only).
TP	X									4	Invalid number for PCB or invalid processing option (command-level only).
TY	X									5	Database not open (command-level only).
TZ	X									5	Length of segment greater than 64 KB.
XA				X						4	Attempt to continue processing the conversation by passing SPA by a program-to-program switch after answering terminal.
XB				X						4	Program passed SPA to other program, but trying to respond.
XC				X						4	Program inserted message with Z1 field bits set. These bits are reserved for system use.
XE				X						4	Tried to ISRT SPA to express PCB.
XF				X	X					4	Alternate PCB specified in ISRT call for SPA had destination set to a logical terminal, but was not defined as ALTRESP=YES. MSC direct routing does not support program-to-program switch between conversational transactions.
XG				X						4	Current conversation requires fixed-length SPAs. Attempt was made to insert SPA to transaction with a different or nonfixed-length SPA.
X2				X				X		4	First insert to transaction code PCB that is conversational is not a SPA.
X3				X						4	Invalid SPA.
X4				X						4	Insert to a transaction code PCB that is not conversational and the segment is a SPA.
X5				X						4	Insert of multiple SPAs to transaction code PCB.
X6				X						4	Invalid transaction code name inserted into SPA. For an APPC or OTMA protected transaction, an immediate program switch or deferred program switch is not allowed.
X7				X						4	Length of SPA is incorrect (user modified first 6 bytes).
X9				X						4	Length of the SPA is greater than the size of the PSB I/O area.
bb[1]	X	X	X	X	X	X	X	X	X	1	No status code returned. Proceed.

Note:

1. bb indicates blank.

Table 142. System Service Calls

PCB Status Code	CHKP	INIT	INQY	JAVA SYNC	LOG	PCB	ROLB	ROLL	ROLS	SETS	SETU	SNAP [1]	STAT [2]	SYNC	XRST	Category	Description
AB	X	X	X		X								X			4	Segment I/O area required; none specified in call.
AC													X			4	Hierarchic error in SSAs.
AD	X	X	X		X		X	X	X	X			X	X	X	4	Function parameter invalid.
AG			X													4	Partial data return. I/O area too small.
AJ		X	X						X							4	Invalid parameter format in I/O area; invalid SSA format; invalid command used to insert a logical child segment. I/O area length in AIB is invalid.
AL							X		X	X						4	Call using I/O PCB in batch program.
AP	X															4	More than 4 user call parameters for a TP PCB are invalid.
AQ			X													4	Invalid subfunction code.
AT					X											4	User I/O area too long.
BJ			X													6	All of the databases included in the PSB are unavailable or no database PCBs are in the PSB.
BK			X													6	At least one of the databases included in the PSB is unavailable or has limited availability, or at least one PCB received an NA or NU status code.
FA	X													X		4	MSDB arithmetic overflow error occurred.
FD		X												X		3	Deadlock occurred.
FF	X															3	No space in MSDB.
FH	X													X		3	DEDB inaccessible.
FI	X						X									4	I/O area not in user's dependent region.
FS	X													X		3	DEDB areas are full.
FV	X													X		3	MSDB verify condition failed.
GA													X			2	Crossing hierarchic boundary.
GE	X												X	X		1	Segment not found.
GL					X											4	Invalid user log code.
NA		X														6	A database was unavailable.
NL	X															4	XEFRDER card not provided. Please supply one.
NU		X														6	A database was unavailable for update.
QC	X															3	No more input messages exist.

Table 142. System Service Calls (continued)

PCB Status Code	CHKP	INIT	INQY	JAVA SYNC	LOG	PCB	ROLB	ROLL	ROLS	SETS	SETU	SNAP [1]	STAT [2]	SYNC	XRST	Category	Description
QE	X						X									4	GN request before GU. GCMD request before CMD.
QF	X															4	Segment less than five characters (segment length is message text length plus four control characters).
RA									X							4	Token does not match one for a SETS, or the PCB did not get BA or BB on last call.
RC									X							4	ROLS call issued with unsupported PCBs in the PSB, or the program is using an attached subsystem.
SA										X						5	Insufficient space.
SB										X						4	Would exceed maximum number of levels allowed.
SC										X	X					5	A SETS/SETU call was issued with unsupported PCBs in the PSB, or the program is using an attached subsystem.
SY				X												5	Internal error during sync-point processing for an IMS Java application.
TA						X										5	PSB not in PSB directory (command-level only).
TC						X										4	PSB already scheduled (command-level only).
TE						X										5	PSB initialization failed (command-level only).
TJ						X										5	DL/I not active (command-level only).
TL						X										4	Conflict in scheduling intent (command-level only).
TN	X				X	X	X	X					X		X	5	Invalid system DIB (command-level only).
TP						X							X			4	Invalid number for PCB or invalid processing option (command-level only).
TR					X	X				X			X			4	CICS XDLIPRE user exit determined the preceding request should not be executed.
TY						X							X			5	Database not open (command-level only).
TZ						X							X			5	Length of segment greater than 64 KB.
V2						X										4	Segment length invalid (command-level only).

Table 142. System Service Calls (continued)

PCB Status Code	CHKP	INIT	INQY	JAVA SYNC	LOG	PCB	ROLB	ROLL	ROLS	SETS	SETU	SNAP [1]	STAT [2]	SYNC	XRST	Category	Description
V7													X			4	Statistics area length invalid (command-level only).
XD	X													X		1	IMS terminating. Further DL/I calls must not be issued. No message returned.
bb[3]	X	X	X		X	X	X		X	X	X	X	X	X	X	1	Good. No status code returned. Proceed.

Notes:

1. SNAP is a Product-sensitive programming interface.
2. STAT is a Product-sensitive programming interface.
3. bb indicates blank.

Status Code Explanations

For EXEC DL/I commands, all status codes, except those identified as being returned to the application program, cause an abnormal termination of the application program.

All explanations apply to both DL/I call (call-level) programs and EXEC DLI (command-level) programs except where split. The term “request” means call, command, or both.

AA

Explanation: IMS ignored a CHNG or ISRT call because the alternate response PCB that is referenced in the call specified a transaction code as a destination. An alternate response PCB must have a logical terminal specified as its destination.

Programmer Response: Correct the CHNG or ISRT call.

AB

Explanation: An I/O area is required as one of the parameters on this call, and the call did not specify one. After this status code is returned, your position in the database is unchanged. AB only applies to full-function DEQ calls.

Programmer Response: Correct the call by including the address of an I/O area as one of the call parameters.

AC

Explanation:

For call-level programs:

An error is in an SSA for a DLET, Get, ISRT, or REPL call for one of these reasons:

- DL/I could not find a segment in the DB PCB specified in the call that has the segment name given in the SSA.
- The segment name is in the DB PCB, but the SSA specifying that segment name is not in its correct hierarchic sequence.
- The call specifies two SSAs for the same hierarchic level.

IMS also returns this status code when a STAT [1] call has an invalid statistics function. After this status code is returned, your position in the database is unchanged.

For command-level programs:

An error is in one of the WHERE or SEGMENT options on a Get or ISRT command for one of these reasons:

- DL/I could not find a segment in the DB PCB specified in the segment name given in the SEGMENT option.
- The segment name is in the DB PCB, but the qualification for the command does not specify it in its correct hierarchic sequence.
- The command specifies two SEGMENT options for the same hierarchic level.

Programmer Response: Correct the segment name

1. STAT is a Product-sensitive programming interface.

in the SSA or SEGMENT option or in the statistics function of the STAT[1] call.

AD

Explanation:

For call-level programs:

Either the function parameter on the call is invalid or the function is not supported for the type of PCB specified in the call. Only applies to full-function DEQ calls. Some possible reasons are:

- The function parameter is invalid.
- A system service call used a PCB that is not the I/O PCB.
- A call issued in a DCCTL environment referred to an unsupported PCB or database.
- A message GU or GN call used an alternate PCB instead of the I/O PCB.
- A database call used a PCB that is not a DB PCB.
- A message GU used the I/O PCB without specifying IN=trancode in the BMP JCL.
- A SETS or ROLS call included the I/O area but omitted the token.
- A CPI Communications driven program issued the SETO call on the I/O PCB.
- A call was issued from an IFP region on an I/O PCB.
- Invalid subsystem level for spool API processing.

For command-level programs:

A command was issued that is not supported in the environment. An example is a system service command in an online program. If the command is correct, some other possible causes are:

- Referencing a DB PCB on a system service command. System service commands must reference the I/O PCB.
- Referencing an I/O PCB for a database command, or not defining an I/O PCB before issuing system service commands.
- A command issued in a DCCTL environment referred to an unsupported database or DB PCB.

Programmer Response: Be sure that the specified function is valid for the PCB specified by the request.

AF

Explanation: GSAM detected a variable-length record whose length is invalid on a GU, GHU, GN, or GHN call.

Programmer Response: Correct the program.

AG

Explanation: During INQY call processing, the I/O area was not large enough to contain all the output data. The I/O area was filled with partial data, as much as would fit in the area provided. AIBOALEN contains the actual length of the data returned to the application and AIBOAUSE contains the output area length that is required for the application program to receive all the data.

During POS call processing, the I/O area was not large enough to contain all the output data. The I/O area size is based on PSBIOASZ. This size was either user specified at PSBGEN by IOASIZE parameter or calculated by ACBGEN. See *IMS Version 9: Utilities Reference: System* - PSBGEN Statement for further detail.

Programmer Response: Correct the application program by using a larger I/O area. For an INQY call, the minimum size of the I/O area is the value contained in the AIBOAUSE field. For an POS call, the minimum size of the I/O area is calculated by (((number of areas) * 24)+2) and maximum is 49154 bytes.

AH

Explanation: You get this status code if you:

1. Specify an options list parameter that was not specified in the call list.
2. The program issued an ISRT call that did not include any SSAs. The ISRT call requires an SSA.
3. If the program was issuing a GU call to a GSAM database, the GU did not specify an RSA. RSAs are required on GU calls to GSAM databases. After this status code is returned, your position in the database is unchanged.

Programmer Response: For cause 2, correct the ISRT call by including a qualification; or for cause 3, correct the GU call by adding an RSA to the call.

AI

Explanation: A data management open error occurred. Some possible reasons are:

- An error is in the DD statements.
- Neither DD statements nor DFSMDA dynamic allocation members were provided for this database.
- The data set OPEN request did not specify load mode, but the data set was empty. An empty data set requires the load option in the PCB.
- The buffer is too small to hold a record that was read at open time.
- No DD statements or DFSMDA members were supplied for logically related databases.
- For an OSAM data set, the DSORG field of the OSAM DCB, DSCB, or JFCB does not specify PS or DA.

- For an old OSAM data set, the BUFL or BLKSIZE field in the DSCB is 0.
- The data set is being opened for load, and the processing option for one or more segments is other than L or LS.
- The allocation of the OSAM data set is invalid. The allocation is probably (1,1), rather than (1,1) and this causes the DSORG to be P0.
- The processing option is L, the OSAM data set is old, and the DSCB LRECL, BLKSIZE, or both, does not match the DBD LRECL, BLKSIZE, or both.
- Incorrect or missing information prevented IMS from determining the block size or the logical record length.
- A catalog was not available for accessing a VSAM database that was requested.
- OS could not perform an OPEN, but the I/O request is valid. Either the data definition information is incorrect, or information is missing.
- RACF was used to protect the OSAM data set, and the control region has no update authorization.

If IMS returns message DFS0730I, you can determine the cause of the OPEN failure from this message in the job log. For more information, see the description of this message in *IMS Version 9: Messages and Codes, Volume 2*.

Programmer Response: These kinds of problems often require the help of a system programmer or system administrator. But before you go to one of these specialists, some things you can do are:

- Check the DD statements. Make sure that the ddname is the same as the name specified on the DATASET statement of the DBD. The segment name area in the DB PCB (call level), or in the DIB (command level) has the ddname of the data set that could not be opened.
- Check the PSB and make sure that the appropriate processing options have been specified for each of the DB PCBs that your program uses.

AJ

Explanation: For call-level programs:

For calls that provide parameters in the I/O area, such as SETS, ROLS, and INIT, the format of the parameters in the I/O area is invalid.

For database calls that include SSAs, such as Get, DLET, REPL, and ISRT, the format of one of the SSAs is invalid. The number in the segment level number field of the DB PCB is the level number of the SSA that is invalid. Some possible reasons for the invalid SSA format are:

- The SSA contains a command code that is invalid for that call.
- The relational operator in the qualification statement is invalid.
- A qualification statement is missing a right parenthesis or a Boolean connector.
- A DLET call has multiple or qualified SSAs.
- A REPL call has qualified SSAs.
- An ISRT call has the last qualified SSA.
- An ISRT call that inserts a logical child segment into an existing database includes the D command code. ISRT calls for logical child segments cannot be path calls.
- The RSA parameter on a GSAM call is invalid.
- The SSA used an R, S, Z, W, or M command code for a segment for which no subset pointers are defined in the DBD.
- The subset command codes included in the SSA are in conflict; for example, if one SSA contained an S status code and a Z status code, Fast Path would return an AJ status code. S means to set the pointer to current position; Z means to set the pointer to 0. You could not use these status codes in one SSA.
- The pointer number following a subset pointer command code is invalid. Either you did not include a number, or you included an invalid character. The number following the command code must be between 1 and 8, inclusive.
- The SSA included more than one R command code. An SSA can include only one R command code.
- The specified size for the SSA is too small. After this status code is returned, your position in the database is unchanged.
- In response to a SETS or ROLS call, the length of the I/O area is 0, the LL field is less than 4, or the ZZ field is not 0.
- In response to an INIT call, the format of the I/O area is incorrect.
- For calls that provide the length of the I/O area in the AIB, such as INQY, the I/O area length is invalid.
- For SETO, I/O area length is less than 4096 or less than the minimum.
- For the Q command code, the specified lock class is not a letter (A-J).

For command-level programs:

An ISRT command attempted to insert a logical child segment using a path command. ISRT commands for logical child segments cannot be path commands.

Programmer Response:

If you receive this status code on a SETS, ROLS, or INIT request, correct the parameters provided in the I/O area.

If you receive this status code on a Get, DLET, REPL, or ISRT request, correct the invalid portion of the SSA. If

you receive this status code on a GSAM call, correct the RSA.

AK

Explanation: For call-level programs:

An SSA contains an invalid field name, or the field name is not defined in the DBD. The number in the segment level number field of the DB PCB is the level number of the SSA that contains the invalid name.

You can also receive this status code if the program is accessing a logical child through the logical parent. DL/I returns AK if the field specified in the qualification has been defined for the logical child segment, and it includes (at least partially) the portion of the logical child that contains the concatenated key of the logical parent.

When you are using field-level sensitivity, a field you specified in the SSA has not been defined in the PSB. After this status code is returned, your position in the database is unchanged.

For command-level programs:

A WHERE option contains an invalid field name. (The field name is not defined in the DBD.) The number in the DIBSEGLV field of the DIB is the level number of the WHERE option that contains the invalid name.

Programmer Response: Correct the SSA or WHERE option.

AL

Explanation: You get this status code if you:

1. Issue a message call in a batch program.
2. Issue a ROLB, ROLS, or SETS call from a batch program under one of the following conditions:
   - The system log is not on DASD.
   - The system log is on DASD, but dynamic backout has not been specified using the BKO execution parameter.

Programmer Response: For cause 1, correct the program so that message calls in a batch program are not issued. For cause 2, either change the program or put the log on DASD with BKO specified on the execution parameter.

AM

Explanation: For call-level programs:

The call function is not compatible with the processing option in the PCB, the segment sensitivity, the transaction-code definition, or the program type. The level number in the PCB is the level number of the SSA that is invalid. Some of the reasons you might get this status code are:

- If you issue a retrieval call with the D command code in a program that does not have the P processing option specified in the DB PCB that was used for the call.
- If you issue a DLET or ISRT call to a terminal-related dynamic MSDB from a program with no input LTERM present. An example is a batch-oriented BMP.
- If the subset pointer referenced in the SSA was not defined in the program's PSB. For example, if your program's PSB specifies that your program can use subset pointers 1 and 4, and your SSA references subset pointer 5, Fast Path returns an AM status code to your program.
- If your program tried to use an S, Z, W, or M command code for a subset pointer to which it was not pointer update-sensitive, as defined in the program's PSB.
- If a BMP, a CICS online program, or an MPP issues an ISRT call with the D command code when the program does not have the P processing option specified in the DB PCB that was referenced in the call. Batch programs do not need the P processing option to issue an ISRT call with the D command code, unless the program uses field-level sensitivity.
- If the processing option is L and the program issued a call other than an ISRT call. Load programs can issue only ISRT calls.
- If a DLET, REPL, or ISRT call that references a DB PCB does not have the necessary processing option for that call. The minimum processing options for these calls are D for DLET, R for REPL, and I for ISRT.
- If you issue a DLET, REPL, or ISRT call for a segment to which the program is not sensitive.
- If you issue a CHKP call on a GSAM or VSAM data set opened for output. This code is returned in the GSAM PCB.
- If you issue a GSAM call with an invalid call function code.
- If you issue an ISRT or DLET call for the index target segment or a segment on which the index target is dependent in the physical database while using an alternate processing sequence.
- If you issue a path replace where the program does not have replace sensitivity, command code N is not specified, and the data for the segment is changed in the I/O area.
- If GSAM could not obtain buffer space because the region size is too small. This is shown by the value X'1C' in the field GBCRTNCD.
- If you issue a DLET, ISRT, or REPL call from a program where the TRANSACT macro that was used at IMS system definition specified INQUIRY=YES for the input message.
- If you issue a call from an ETO terminal to a terminal-related MSDB or a non-terminal-related

MSDB with terminal-related keys. See *IMS Version 9: Administration Guide: Transaction Manager* for more information on ETO.

- If you issue any type of call with update intent to a MSDB from a dynamically defined device such as a LU 6.2, ETO, or OTMA device.
- If you issue a REPL call with a PCB that specifies VIEW=MSDB, the segment must have a key. This includes any segment in a path if command code 'D' is specified.

After this status code is returned, your position in the database is unchanged.

For command-level programs:

The command is not compatible with the processing option in the PCB or segment sensitivity. The level number in the DIB is the level number of the qualification that is invalid. Some of the reasons you might get this status code are:

- If you issue a path retrieval command in a program that does not have the P processing option specified in the DB PCB that was used for the call.
- If the processing option is L and the program issued a command other than a LOAD command. Load programs can issue only LOAD commands.
- If you issue a DLET, REPL, or ISRT command that references a DB PCB that does not have the necessary processing option for that command. The minimum processing options for these calls are D for DLET, R for REPL, and I for ISRT.
- If you issue a DLET, REPL, or ISRT command for a segment to which the program is not sensitive.
- If you issue a CHKP command if a GSAM or VSAM data set is open for output.
- If you issue a GSAM call with an invalid call function code.
- If you issue an ISRT or DLET command for the index target segment, or a segment in the physical database on which the index target is dependent, while using an alternate processing sequence.
- If you issue a path replace where the program does not have replace sensitivity, command code N is not specified, and the data for the segment is changed in the I/O area.
- If you issue a call to a GSAM dummy data set. Any call to a GSAM dummy data set is invalid.

Programmer Response: Correct the request, or make the necessary changes in the PCB.

AO

Explanation: A BSAM, GSAM, VSAM, or OSAM physical I/O error occurred. When issued from GSAM, this status code means that the error occurred when:

- A data set was accessed.
- The CLOSE SYNAD routine was entered. The error occurred when the last block of records was written prior to the closing of the data set.

IMS does not return an AO status code for write errors with BSAM, VSAM, and OSAM.

If your program receives this status code after issuing a call, this call does not cause the database to be stopped.

Programmer Response: Determine whether the error occurred during input or output, and correct the problem. These problems usually require the help of a system programmer or system administrator.

AP

Explanation: A message or CHKP call is invalid because more than four parameters (or five if a parameter count is specified) are in a message call or a CHKP call issued in a transaction-oriented BMP. The following exceptions apply:

- A batch-oriented BMP can issue a CHKP call with more than 4 (or 5) parameters.
- One parameter after the I/O area parameter is allowed in order for the application program to specify a MOD name in an ISRT call. It is counted towards the maximum of four (or five) parameters.

Programmer Response: Correct the call.

AQ

Explanation: The AIB contains an invalid subfunction, or the INQY call specifies an invalid function.

Programmer Response: Specify a valid subfunction. Valid INQY call subfunctions are null, DBQUERY, ENVIRON, FIND, or PROGRAM.

AR

Explanation: The options list contains an error that is related to a keyword. The feedback area, if one is provided, will contain additional error information.

Programmer Response: Correct the request.

AS

Explanation: An IAFP specific processing error has occurred. The PRTO= option contained invalid data set processing options. The feedback area, if provided, will contain additional error information.

Programmer Response: Correct the request.

AT

Explanation: The length of the data in the program's I/O area is greater than the area reserved for it in the control region. The length of the area reserved is defined by the ACB utility program, DFSUACB0, and is printed as part of its output.

Programmer Response: If the program is in error, correct the program. If the program is correct, reserve a larger control region by specifying parameters on the PSBGEN statement of PSBGEN.

AU

Explanation: The total length of the SSAs in the database call is greater than the area reserved for them in the control region. The length of the area reserved is defined by the ACB utility program, DFSUACB0, and printed as part of its output. After this status code is returned, your position in the database is unchanged.

Programmer Response: If the program is in error, correct the program. If the program is correct, increase the PSB SSA space defined in the PSBGEN.

AX

Explanation: A failure to get CSA storage, a failure of the DFSLUMIF call, or a processing error with the IAFP Spool API occurred. When this code is returned, diagnostic information is written to the log in a '67D0' log record. Spool API processing errors return a DFS0013E message.

A RACROUTE REQUEST=VERIFY,EVIRON=CREATE (RACF RACINIT) made during an AUTH call for LU 6.2 was unsuccessful.

An OTMA user exit returned invalid routing information. See OTMA return codes in the *IMS Version 9: Open Transaction Manager Access Guide and Reference*.

Programmer Response: These problems usually require the help of a system programmer or system administrator.

AY

Explanation: IMS ignored a message `ISRT` call because the logical terminal referenced by the alternate response PCB currently has more than one physical terminal assigned to it for input purposes.

Programmer Response: Ask the master terminal operator to determine (using /DISPLAY ASSIGNMENT LTERM x) which physical terminals (two or more) refer to this logical terminal. Use the /ASSIGN command to correct the problem.

AZ

Explanation: IMS ignored a `PURG` or `ISRT` call in a conversational program. Some possible reasons are:

- Issuing a `PURG` call referencing the I/O PCB or an alternate response PCB. Conversational programs can issue `PURG` calls only when the `PURG` call references an alternate PCB that is not an alternate response PCB.
- Issuing a `PURG` call to send the SPA.
- Issuing an `ISRT` or a `PURG` call referencing an alternate PCB that is set for an invalid destination or for a destination that IMS cannot determine.
- Issuing an `ISRT` call referencing an alternate PCB whose destination is a conversational transaction code when the first segment inserted is not the SPA; or when IMS cannot determine whether or not the SPA was the first segment inserted.

Programmer Response: Correct the `PURG` or `ISRT` call.

A1

Explanation: IMS returns the A1 status code for one of the following reasons:

- AUTH call for LU 6.2 input did not find a PST LU 6.2 extension block or did not find a UTOKEN.
- CHNG call against alternate response PCB when the application program has not yet issued a GU.
- The MSC program routing exit routine (DFSCMPR0) was called while processing a CHNG call and one of the following occurred:
  - The exit routine rejected the call by returning with return code 8 (A1 status code).
  - The exit routine returned with a RC=4 to route the message back to the originating system; however, the originating system has not been determined because the application program has not issued a `GU`.
  - The SYSID returned in R0 by the exit routine is not a valid remote SYSID.
  - The MSNAME pointed to by the address in R1, set by the exit routine, is not a valid remote MSNAME.
- The MSC program routing routine exit (DFSMSCE0) was called while processing an ISRT or CHNG call and one of the following occurred:
  - The exit routine rejected the call by setting MSPRFL3=MSPR3REJ in the DFSMSCEP user parameter list that is passed to the exit.
  - IMS detected an error while processing the reroute request from the exit. It issued a message ″DFS070 Unable to route message RSN=xxyy″ and wrote a 6701-MSCE log record to the IMS log. For more information about this error, see the topic on diagnosing message routing problems in *IMS Version 9: Diagnosis Guide and Reference*.

- The destination name supplied in the I/O area of a CHNG call is invalid.
- The destination name supplied in the I/O area of a CHNG call is valid (the destination is a program and the PCB is not an alternate response PCB), but the transaction is Fast Path exclusive.
- AUTH call parameter list contained an invalid generic CLASS name. No access checking was done.
- The routing exit routine (DFSCMPR0 or DFSMSCE0) attempted an invalid request to override a direct routing request.
- The OTMA Prerouting Exit routine (DFSYPRX0) might have specified an incorrect 16-byte OTMA client override name. The client name cannot contain all blanks. If the client name is shorter than 16 bytes, it must be padded with blanks.
- The length of modified OTMA user data is over 1K for the OTMA DFSYDRU0 exit.
- The OTMA DFSYPRX0 and DFSYDRU0 user exit routines returned an unsupported return code.

Programmer Response: Correct the CHNG or AUTH call, MSC program routing exit (DFSCMPR0 or DFSMSCE0), or ensure that the specified destination is valid.

A2

Explanation: The program issued a CHNG call against an invalid PCB. The PCB was invalid for one of these reasons:

- It was not an alternate PCB.
- It was an alternate PCB, but it was not modifiable.
- It was being used to process a message and had not completed processing it.

Programmer Response: Check the PCB that was used by the CHNG call and determine which PCB should have been used for the call.

A3

Explanation: The program issued an ISRT or PURG call that referenced a modifiable alternate PCB that did not have its destination set. IMS returns this status code to PURG calls only when the PURG call specified an I/O area as one of the parameters.

Programmer Response: Issue a CHNG call to set the destination of the modifiable alternate PCB, and then reissue the ISRT or PURG call.

A4

Explanation: A security violation was detected during processing of an AUTH, CHNG, or ISRT call of a SPA on a conversational response. Some of the reasons for this status code are:

- Transaction authorization is active and either RACF or a transaction authorization exit routine returned a nonzero return code.
- The user is not authorized for access to the RESOURCE name in the class requested in the AUTH call. No installation data is returned.
- No source CNT is available, which might be caused by the application program not having issued a GU.
- A program-to-program message switch is being done. In this case, the applicable authorization LTERM is based on the original message, and this authorization does not allow this function to be performed.

Programmer Response: Check the transaction code to make sure it was entered correctly. If it was, check with the person who handles security at your installation.

A5

Explanation: An ISRT or PURG call supplied an invalid parameter list. The call supplied the fourth parameter (the MOD name), but the ISRT or PURG being issued was not for the first segment of an output message.

Programmer Response: Correct the ISRT or PURG call.

A6

Explanation: For a message processing program (MPP or BMP), IMS ignored a message ISRT call because the length of the message segment being inserted exceeds the size specified in the SEGSIZE keyword of the TRANSACT macro. For a Fast Path program (IFP), the length of the output message to a Fast Path terminal exceeds the size specified in the FPBUF parameter of the TERMINAL macro.

Programmer Response: Correct the output message segment.

A7

Explanation: IMS ignored a message ISRT call for one of the following reasons:

- The number of message segments inserted exceeds the number specified in the SEGNO keyword of the TRANSACT macro.
- The IMS user Queue Space Notification exit routine (DFSQSPC0) prohibited the insert to prevent the message queue data sets from overflowing. However, the ISRT is not ignored for the message in progress when the DFSQSPC0 threshold is exceeded. The in-progress message will be processed. Any subsequent ISRTs from that application are immediately rejected with a status of A7.
- The IMS Shared Queues Space Notification exit routine (DFSQSSP0) prohibited the message insert. Possible reasons are:
  - The shared queues structure is in overflow

  - The queue for the destination is on the overflow structure
  - The number of messages inserted for this unit of work exceeds a user-defined limit

  The in-progress message will be processed. Any subsequent ISRTs from that application are immediately rejected with a status of A7.
- The IMS user Queue Manager Space Notification exit routine (DFSQSPC0, or DFSQSSP0 for shared queues) prohibited the insert because the destination TRANSACTION or LTERM was stopped. The in-progress message will be processed. Any subsequent ISRTs from that application are immediately rejected with a status of A7.

Programmer Response: Check the output messages and correct them. Use ROLB to backout in-progress messages.

A8

Explanation: IMS ignored an ISRT call because:

- An ISRT call to an alternate response PCB must not follow an ISRT call to the I/O PCB.
- An ISRT call to the I/O PCB must not follow an ISRT call to an alternate response PCB.

Programmer Response: Correct the ISRT call.

A9

Explanation: IMS ignored the ISRT call because:

- The ISRT call referenced an alternate response PCB defined as SAMETRM=YES, but the PCB represented a logical terminal that is not part of the originating physical terminal. An alternate response PCB defined as SAMETRM=YES must represent the same physical terminal as the physical terminal associated with the originating logical terminal.
- The originating terminal is in response mode, and the alternate response PCB is not associated with that logical terminal.

IMS does not return this status code if the program makes either of these errors while communicating with a terminal in a remote IMS system through MSC.

Programmer Response: Determine whether the application program is in error, the output logical terminal has been incorrectly reassigned (using the /ASSIGN command), or if SAMETRM=YES should not have been specified for the alternate response PCB.

BA

Explanation: The request was not completed because it required access to unavailable data.

A status of BA is returned on a DL/I call that attempts to access an unavailable partition. If the very next DL/I call is a GN that is either completely unqualified or qualified only by root name, then the next partition is selected. The next-partition selection continues until either an available partition is found or there are no more partitions in the database. If an available partition is returned, the call returns the first root in that partition. A GN call that is qualified only on a dependent segment name results in a BA status if the prior call had a BA status returned for the root level.

Only the updates done for the current request, prior to the time it encountered the unavailable data, are backed out. The state of the database is as it was before the failing request was issued. If the request was REPL or DLET, the PCB position was unchanged. If the request was a Get or ISRT request, the PCB position is unpredictable.

For a DEDB, this status code might be returned if no updates have been made by the current call. If updates have been made by the current call since the last commit point, a BB status code is returned instead. If changes have been made by a previous call, the application program must decide whether to commit these changes.

Rather than having an abnormal termination occur, this status code is returned to the application program that issued the EXEC DLI command.

If you use PROCOPT=GO and access DEDB areas with SDEP segments, note that some lock requests must be made in a shared SDEP environment. Failing to make these lock requests can cause a BA status code on a DL/I call involving an SDEP segment. For example, if there is a retained lock on a current SDEP CI held by a failed IMS subsystem and a partner IMS issues a DL/I GET call with PCB PROCOPT=GO, a BA status code is returned if the call targets the locked CI.

Programmer Response: This is an information-only status code.

BB

Explanation: The BB status code is the same as BA except that all database updates that the program made since the last commit point are backed out, and all nonexpress messages sent since the last commit point are canceled. The PCB position for all PCBs is at the start of the database.

For a DEDB, this status code might be returned if updates have been made by the current call.

Rather than having an abnormal termination occur, this status code is returned to the application program that issued the EXEC DLI command.

Programmer Response: This is an information-only status code.

BC

Explanation: The response from an INIT STATUS GROUPB call was not completed because it required access to unavailable data.

All database resources that were allotted up to the last commit point are backed out, with the exception of GSAM and DB2 UDB for z/OS. All output messages are backed out to the last commit point. Input messages are requeued.

Programmer Response: This is an information-only status code.

BJ

Explanation: All of the databases in the PSB are unavailable, or there are no database PCBs in the PSB.

Each PCB (excluding GSAM) received an NA status code as the result of the INQY DBQUERY call.

Programmer Response: This is an information-only status code.

BK

Explanation: At least one of the databases included in the PSB is unavailable or has limited availability.

At least one PCB received an NA or NU status code as the result of processing the INQY DBQUERY call.

Programmer Response: This is an information-only status code.

CA

Explanation: The program issued a CMD call with an invalid command verb, or the command verb does not apply to the IMS system that the program is running in. IMS does not return any command responses.

Programmer Response: Correct the command in the CMD call.

CB

Explanation: The command entered in the CMD call is not allowed from an AOI program. IMS does not return any command responses.

Programmer Response: Correct the command. For a list of the commands that an AOI program can issue, see *IMS Version 9: Customization Guide*.

CC

Explanation: IMS has executed the command and returned one or more command responses.

Programmer Response: Your program should issue GCMD calls as necessary to retrieve the responses.

CD

Explanation: The command that was entered on the CMD call violates security, or the application program is not authorized to issue CMD calls. IMS does not execute the command or return any command responses.

Programmer Response: Correct the command. If necessary, check with the person in charge of security at your installation to find out why your program is restricted from using that command.

CE

Explanation: IMS rescheduled the message that this GU call retrieved since the last CMD call. The program had not reached a commit point when the message was rescheduled.

Programmer Response: This is an information-only status code.

CF

Explanation: The message being returned on the GU call was received by IMS before the start of this IMS execution. CF can be received on a CHKP call when an I/O area is specified for an MPP or message-oriented BMP. This occurs when a CHKP call issues an internal GU call.

Programmer Response: This is an information-only status code.

CG

Explanation: The message retrieved by this GU originated from an AOI exit routine.

Programmer Response: This is an information-only status code.

CH

Explanation: IMS ignored the CMD call just issued because the AOI command interface detected a system error and was unable to process the command. IMS processing continues.

Programmer Response: Reissue the command.

CI

Explanation: CI is a combination of CE and CF. The message retrieved by this GU was scheduled for transmission before IMS was last started. The message was rescheduled, but the program had not reached a commit point.

Programmer Response: This is an information-only status code.

CJ

Explanation: CJ is a combination of CE and CG. The message retrieved by this GU was scheduled for transmission before IMS was last started. The message originated from an AOI exit routine.

Programmer Response: This is an information-only status code.

CK

Explanation: CK is a combination of CF and CG. The message retrieved with this GU originated from an AOI user exit. The message was scheduled for transmission before IMS was last started.

Programmer Response: This is an information-only status code.

CL

Explanation: CL is a combination of CE, CF, and CG. Please see the explanations of those codes.

Programmer Response: This is an information-only status code.

CM

Explanation: The command that was entered on the CMD call has been executed and completed, but it resulted in an exception response that could not be built because of an insufficient amount of general work area (WKAP).

Programmer Response: Increase WKAP if you want retrieval of the response.

CN

Explanation: The IOASIZE= parameter that was specified on the PSBGEN macro is defined for less than the required minimum for CMD calls (132 bytes).

Programmer Response: Redefine IOASIZE= parameter on the PSBGEN for a minimum of 132 bytes.

CR

Explanation: The IMS Java application attempted to issue a Java GU message call before issuing a Java commit.

Programmer Response: You must issue a Java commit from your application prior to issuing another Java GU message call.

DA

Explanation: The program issued a DLET or REPL that tried to modify the key field in the segment or, when using field-level sensitivity, a REPL call tried to modify a field that had REPL=NO specified on the SENFLD STMT in the PSB. You cannot change a segment's key field.

Programmer Response: Correct the request.

DJ

Explanation: The program issued a DLET or REPL call that was rejected because the segment was not currently in hold status. Some possible reasons for this status code are:

- The segment had not been previously retrieved with a Get Hold call.
- The segment was already deleted using this PCB. After one Get Hold call, multiple REPL calls or a DLET call following a REPL call are valid, but multiple DLET calls are not.
- The segment was obtained using a secondary index as the processing sequence. A subsequent DLET or REPL call using either this PCB or another PCB within the PSB caused the current secondary index entry for this PCB to be deleted.
- A checkpoint call was issued following the Get Hold call and preceding the REPL or DLET call.
- A rollback call was issued following the get hold call and preceding the REPL or DLET call.

Programmer Response: Correct the program so that the segment is in hold status when a DLET or REPL is issued.

DX

Explanation: The program issued a DLET that violates the delete rule for that segment.

Programmer Response: Check the program to see whether or not the program should delete that segment; if it should, check with your DBA (or the equivalent specialist at your installation) to find out what delete rule has been specified for that segment.

EM

Explanation: The EM status (empty area) indicates that there are no valid sequential dependent segments in the area.

Programmer Response: Check to see that the correct area is being processed by the utility and that sequential dependent segments have been inserted.

E1

Explanation: The DFSMSCE0 user routing exit rejected the ISRT or CHNG call by setting MSPRFL3=MSPR3REJ and MSPRSTAT=E1 in the DFSMSCEP user parameter list that is passed to the exit.

Programmer Response: Refer to the user installation copy of the DFSMSCE0 exit for information on the MSPR3REJ and MSPRSTAT settings. Contact your system programmer.

E2

Explanation: The DFSMSCE0 user routing exit rejected the ISRT or CHNG call by setting MSPRFL3=MSPR3REJ and MSPRSTAT=E2 in the DFSMSCEP user parameter list that is passed to the exit.

Programmer Response: Refer to the user installation copy of the DFSMSCE0 exit for information on the MSPR3REJ and MSPRSTAT settings. Contact your system programmer.

E3

Explanation: The DFSMSCE0 user routing exit rejected the ISRT or CHNG call by setting MSPRFL3=MSPR3REJ and MSPRSTAT=E3 in the DFSMSCEP user parameter list that is passed to the exit.

Programmer Response: Refer to the user installation copy of the DFSMSCE0 exit for information on the MSPR3REJ and MSPRSTAT settings. Contact your system programmer.

FA

Explanation: IMS returns this status code when the program reaches a commit point and an arithmetic overflow occurs in an MSDB, DEDB, or VSO DEDB during that commit interval since the last commit point (or, if the program had not reached a commit point, since the program began processing). You can receive this status code on a SYNC call, a CHKP call, or a GU call to the message queue, depending on your program. The overflow occurred after the program issued a FLD/CHANGE call, or a REPL call for the MSDB, DEDB, or VSO DEDB. When this happens, IMS issues an internal ROLB call to eliminate the changes that the program has made since the last commit point. All database positioning is lost.

Programmer Response: Reprocess the transaction.

FC

Explanation: The program issued a request that is not valid for the segment type.

Programmer Response: Correct the request.

FD

Explanation: A nonmessage driven BMP reached a deadlock when IMS tried to get DEDB or MSDB resources (either DEDB UOWs or overflow latches) for the program. Or, a mixed-mode BMP reached a deadlock on any resource, either Fast Path or full function. IMS eliminates all database updates that the program has made since the last SYNC call, CHKP request, or SYMCHKP command (or since the program started processing, if the program has not issued a SYNC call or CHKP request). All database positioning is lost, unless you specified the P processing option in the PCB. Messages to a non-express alternate PCB are discarded.

Rather than having an abnormal termination occur, this status code is returned to the application program that issued the EXEC DLI command.

Programmer Response: Start processing from the last commit point. If you reach a deadlock again, terminate the program.

FE

Explanation: IMS returns this status code any time a program issues a FLD call that receives a nonblank status code in the FSA.

Programmer Response: See “Fast Path Databases” in *IMS Version 9: Application Programming: Database Manager* for an explanation of FSA status codes and correct the FLD call.

FF

Explanation: A program issued an ISRT call against an MSDB that has no free space. If IMS determines that there is no free space when the program issues the ISRT call, the program receives the FF status code for that call. IMS might not determine this until the program reaches the next commit point. In this case, IMS returns FF when the program issues a GU call to the message queue, a SYNC call, or a CHKP call, depending on which call caused the commit point.

Programmer Response: To avoid this situation, specify more space for the MSDB at the next system start (cold start or normal restart).

FG

Explanation: FG is a combination of FE and FW. A batch-oriented BMP issued a FLD call that received a nonblank status code in the FSA, and the program has depleted its normal buffer allocation.

Programmer Response: Check the FSA status code and correct the FLD call, and then issue SYNC or CHKP calls in the program more frequently. One way to handle this status code is to branch to an error routine that causes the program to issue SYNC or CHKP calls more frequently when it receives this status code.

FH

Explanation: A DEDB area was inaccessible to the requested service when the application program issued a database request or when the application program reached a commit point. The AREA was stopped or the DEDB randomizing routine was not loaded into storage. A /START DATABASE dedbname or UPDATE DB NAME(name) START(ACCESS) command will cause the DEDB randomizing routine to be reloaded.

If IMS returns this status code on a call that caused a commit point to occur (a SYNC call, a message GU, a CHKP request, or a SYMCHKP command), IMS issues an internal ROLB call to eliminate the program's database updates and message output created since the last commit point.

If your program is accessing a DEDB in a data-sharing environment, and if the authorization fails when your program issues its first DL/I call to the DEDB, Fast Path returned this status code. Fast Path also notified the master terminal operator of the authorization failure. Your position in the database is before the first root in the next area. A GN will get the next available record (unless that one is also inaccessible).

If a program has access to an area through a PCB with PROCOPT=H and another PCB without PROCOPT=H, it is possible that only calls to the PCB with PROCOPT=H will receive the FH status code. This is because the area is accessible to IMS, but the required HSSP (high-speed sequential processing) setup could not be established. Message DFS0533A explains the reason for this occurrence and is sent to the job log. This status code is also returned if the PROCOPT for one PCB is more restrictive than the PROCOPT of a different PCB in the same PSB. Position is set to the beginning of the next accessible area.

Rather than having an abnormal termination occur, this status code is returned to the application program that issued the EXEC DLI command.

Programmer Response: If the data in the area is important, contact the DBA. If the data in the area is unimportant, the program should roll back the changes. Your program can continue processing with the next available area.

If the status code is related to an HSSP setup problem, fix the error as described in the message DFS0533A in the job log.

Explanation: IMS determined that one of the following events occurred:

- The storage address at the start of the I/O area supplied by the program could not be referenced.
- The storage address computed as the start of the I/O area plus the length of the segment or segments being returned could not be referenced.

IMS sets this status code to avoid a potential program check abend during data movement. The absence of an FI status code does not necessarily mean that the supplied I/O area address is logically correct or that the area is large enough.

Note: If the AIB interface is being used, the supplied length in the AIB is validated against returned segment lengths. If this validation fails, the appropriate AIB return and reason codes are set. If this validation succeeds, IMS still checks the actual storage addresses involved in the move and it can return an FI status code. If an AIB interface is not used, only the storage address validation is performed.

Programmer Response: Correct the program.

FM

Explanation: The application program issued a request for which the randomizing routine returned a return code of 4.

The key supplied on a DL/I call to a HALDB was greater than the high key value for the last partition. Or the user's partition selection exit returned with RC=04 after having been passed a key value with which to select a partition.

Rather than having an abnormal termination occur, this status code is returned to the application program that issued the EXEC DLI command.

Programmer Response: The database position has not changed. The application program must determine subsequent processing.

FN

Explanation: The program issued a FLD call that contains a field name in the FSA that is not defined in the DBD. IMS does not continue processing the FLD call or any of the FSAs in the FLD call. IMS returns an FN status code in this situation even if an earlier FSA in the same FLD call received an FE status code.

Programmer Response: Issue a ROLB call to remove the effects of the incorrect FLD call and then correct the FLD call.

FP

Explanation: The I/O area referenced by a REPL, ISRT, or FLD/CHANGE call to an MSDB contains an invalid packed-decimal or hexadecimal field.

Programmer Response: Correct the data in the I/O area.

FR

Explanation: One of the following situations exists:

- A batch-oriented BMP issued a database request that forced the system to go beyond the buffer limit specified for the region.
- A batch-oriented BMP received a GC status code in a PCB with PROCOPT=H. Another commit process was required before using the PCB again.

IMS eliminates all database changes made by the program since the last SYNC call, CHKP request, or SYMCHKP command the program issued (or since the program started processing if the program has not issued any SYNC calls, CHKP requests, or SYMCHKP commands). All database positions for PCBs not referring to a DEDB with PROCOPT=P or H active are lost. If the PCB referred to a DEDB with PROCOPT=P or H active, the position is set to the valid position after the last commit process, or the start of the valid range if there was no commit process.

Rather than having an abnormal termination occur, this status code is returned to the application program that issued the EXEC DLI command.

Programmer Response: Either terminate the program and restart it with a larger buffer allocation, or provide a routine that causes frequent commit points. If PROCOPT=H is used, make sure that a commit point is requested after a GC code has been returned.

FS

Explanation: For a root segment or direct dependent segment, this status code is returned only to BMPs. For a sequential dependent segment, this status code can be returned to either a BMP or a message-driven program:

- A BMP issued an ISRT request for a root segment, a direct dependent segment, or a sequential dependent segment, but IMS could not get enough space in either the root-addressable or sequential dependent part of the DEDB area to insert the new segment:
  - If IMS returns this status code on an ISRT request for a root segment, a direct dependent segment, or a sequential dependent segment, the problem is with the root-addressable portion of the area, the independent overflow area, or the sequential dependent area.
  - If IMS returns this status code when the program issues a SYNC call, CHKP request, or SYMCHKP command, the problem is with the sequential dependent part of the area.

  In either case, IMS eliminates all of the database changes the program has made since the last commit point (or since the program started processing, if the program has not reached a commit point).
- A message-driven program issued an ISRT request for a sequential dependent segment, and the sequential dependent part is full.

  Related Reading: For more information about sequential dependent space management, see the *IMS Version 9: Administration Guide: Database Manager*.

Rather than having an abnormal termination occur, this status code is returned to the application program that issued the EXEC DLI command.

Programmer Response: Continue with other processing, and report the problem to the system programmer.

FT

Explanation: The Fast Path program issued a call to a Fast Path database that included too many SSAs. A call to a DEDB can include up to 15 SSAs. A call to an MSDB can include only one SSA.

Programmer Response: Correct the call.

FV

Explanation: At least one of the verify operations in a FLD call issued in a batch-oriented BMP failed when the program reached a commit point. IMS eliminates the database updates the program has made since it issued the last SYNC or CHKP call (or if the program has not issued a SYNC or CHKP call, since the program started processing). All database positioning is lost.

Programmer Response: Reprocess the transaction or terminate the program.

FW

Explanation: A BMP has used all buffers that are allocated for normal use, or all buffers have been modified. IMS returns this status code to warn you that you might be running out of buffer space. An FR status code might be imminent.

If you have been processing a DEDB, you get FW for requests that change data.

If you have been processing an MSDB, you get FW for all calls that change data and for GH calls.

With a DEQ call, you receive this code if no buffers can be released.

Rather than having an abnormal termination occur, this status code is returned to the application program that issued the EXEC DLI command.

Programmer Response: You can supply an error-handling routine, triggered by the FW status code, that will cause your program to issue SYNC calls, CHKP requests, or SYMCHKP commands as soon as an FW status code is returned to your program. This reduces the total buffer requirement. To avoid receiving the FW status code, issue SYNC or CHKP calls more frequently.

FY

Explanation: PROCOPT=H PCBs process segments sequentially in the forward direction. Position is established on a UOW and is moved forward only. Attempts to retrieve segments prior to the current UOW position are not allowed for HSSP application programs and will not be processed; they receive this status code.

Programmer Response: Change the application program to retrieve segments in a forward direction only; use a PCB with a PROCOPT value other than H to access the segments in the backward direction.

GA

Explanation: In trying to satisfy an unqualified GN or GNP call, IMS crossed a hierarchic boundary into a higher level.

If IMS returns GA after a STAT[2] request, it means that the request that was just issued retrieved the total statistics for all the VSAM buffer subpools.

Rather than having an abnormal termination occur, this status code is returned to the application program that issued the EXEC DLI command. This call results in a return code of 0.

Programmer Response: This status code is an information-only status code.

GB

Explanation: In trying to satisfy a GN call, DL/I reached the end of the database or, if you used a SETR statement, the end of the current range. In this situation, the SSA for the call or qualification for the command specified data beyond the last occurrence, and the search was not limited to the presence of a known or expected segment occurrence.

For example, a GN call was specified for a key greater than a particular value, rather than a GU call specifying a key value beyond the highest value.

A GB status code can be returned for:

- An unqualified GN call
- A qualified GN call without a maximum key (if no data is returned to the I/O area)

In contrast, a GE status code, instead of a GB status code, can be returned for:

- A GU call
- A qualified GN call without a maximum key (if data is returned to the I/O area)
- A qualified GN call with a maximum key

IMS also returns this status code when it has closed a GSAM data set. The assumed position for a subsequent request for a GSAM or full-function database is the beginning of the database, or if a SETR statement was used for a DEDB database, the beginning of the current range.

Rather than having an abnormal termination occur, this status code is returned to the application program that issued the EXEC DLI command.

Programmer Response: User determined.

GC

Explanation: An attempt was made to cross a unit-of-work (UOW) boundary, or an area boundary in the case of PROCOPT=H. For a batch-oriented BMP PCB with PROCOPT=H or PROCOPT=P, at least one call on the referenced PCB changed position in the database since the last commit process or after the program began executing. IMS did not retrieve or insert a segment. Position is before the first segment of the following UOW.

Rather than having an abnormal termination occur, this status code is returned to the application program that issued the EXEC DLI command.

Programmer Response: User determined. However, if the GC status code results from a call that referred to a PCB with PROCOPT=H, the program must cause a commit process before any other call can be issued for that PCB. Failure to do so results in an FR status code.

GD

Explanation: The program issued an ISRT call that was not qualified for all levels above the level of the segment being inserted. For at least one of the levels for which no qualification was specified, a prior request using this PCB established valid position on a segment. That position is no longer valid for one of these reasons:

- The segment has been deleted by a DLET call using a different DB PCB.
- The segment was retrieved using an alternate processing sequence, and a REPL or DLET call for this DB PCB caused the index for the existing position to be deleted.

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2. STAT is a Product-sensitive programming interface.

Rather than having an abnormal termination occur, this status code is returned to the application program that issued the EXEC DLI command.

Programmer Response: User determined.

GE

Explanation:

For call-level programs:

IMS returns this status code when:

- DL/I is unable to find a segment that satisfies the segment search argument described in a Get call.
- For an ISRT call, DL/I cannot find one of the parents of the segment being inserted.
- For an ISRT call, DL/I was requested to insert a root segment outside of the accessible range determined by a SETR statement.
- The program issued a STAT[3] call for OSAM buffer pool statistics, but the buffer pool does not exist.
- The program issued a STAT[3] call for VSAM buffer subpool statistics, but the subpools do not exist.
- A nonmessage driven BMP issued a FLD call to an MSDB segment. After the FLD call but before a commit point, the MSDB segment was deleted. GE can be returned for this reason after either a SYNC or a CHKP call.

For command-level programs:

- DL/I is unable to find a segment that satisfies the segment described in a Get command.
- For an ISRT command, DL/I cannot find one of the parents of the segment you're inserting.
- The program issued a STAT[3] command for OSAM buffer pool statistics, but the buffer pool does not exist.
- The program issued a STAT[3] call for VSAM buffer subpool statistics, but the subpools do not exist.

Rather than having an abnormal termination occur, this status code is returned to the application program that issued the EXEC DLI command.

Programmer Response: The action you take depends on your program.

Note: When a GNP call for a DEDB sequential dependent segment results in a GE status code, the I/O area contains a length indication of 10 bytes and the original position of the deleted portion of the sequential dependent part. Position is at the end of the sequential dependent chain.

A GE status code can be returned to a program using PROCOPT=GOx for a segment that exists in a database during CI splits.

GG

Explanation: DL/I returns this status code if the segment being retrieved contains an invalid pointer and the application program has a processing option of GOT or GON. (Processing options are explained under PROCOPT in the discussion of program specification block generation in *IMS Version 9: Utilities Reference: System*.) This can occur when update activity in the database is going on concurrently with your program's processing.

For call-level programs:

The PCB key feedback length and area will be based on the last segment that satisfied the call. Your position is at the beginning of the database.

For command-level programs:

If your request specified KEYFEEDBACK, the DIBKFBL will contain the length of the key of the last segment that satisfied the command. Your position is at the beginning of the database.

Rather than having an abnormal termination occur, this status code is returned to the application program that issued the EXEC DLI command.

Programmer Response: Continue processing with another segment or terminate the program. The request that resulted in the GG status code might be successful if you issue it again.

GK

Explanation: DL/I has returned a different segment type at the same hierarchic level for an unqualified GN or GNP call.

Rather than having an abnormal termination occur, this status code is returned to the application program that issued the EXEC DLI command. This call results in a return and reason code of 0.

Programmer Response: This is an information-only status code.

GL

Explanation: For either call-level or command-level programs:

The program issued a LOG request that contained an invalid log code for user log records. The log code in a LOG request must be equal to or greater than X'A0'.

For call-level programs:

DL/I returns GL on a DEQ request when the first byte of the I/O area referenced in the request did not contain a valid DEQ class (B-J).

3. STAT is a Product-sensitive programming interface.

For command-level programs:

EXECDLI returns a GL status for either a GN, GNP, GU, or DEQ command when the alphabetic character coded on the LOCKCLASS option is not within the range of B to J. An ABENDU1041 is then issued.

Programmer Response: Correct the log code, which is the first byte of the log message.

For call-level programs:

If the program received this status code for a DEQ request, check the DEQ class code in the I/O area.

For command-level programs:

Check the alphabetic character coded for class on the LOCKCLASS option to ensure that it is in the range from B to J.

GP

Explanation: The program issued a GNP when there is no parentage established, or the segment level specified in the GNP is not lower than the level of the established parent.

Programmer Response: Make sure you have established parentage before issuing GNP, and check the segment level specified by the GNP.

HT

Explanation: The HT status indicates that the High-Water-Mark time stamp (HWM TS) is less than the Logical Begin time stamp (LB TS).

Programmer Response: The time stamp in the High-Water-Mark segment was not updated on the area data set during utility setup and partner notification. Check whether the data-sharing partner is still running. The RLM may have a lock for the sequential dependent CI.

II

Explanation: The program issued an ISRT call that tried to insert a segment that already exists in the database. Current position after an II status code is just before the duplicate of the segment you tried to insert. Some of the reasons for receiving this status code are:

- A segment with an equal physical twin sequence field already exists for the parent.
- A segment with an equal logical twin sequence already exists for the parent.
- The logical parent has a logical child pointer, the logical child does not have a logical twin pointer, and the segment being inserted is the second logical child for that logical parent.
- The segment type does not have physical twin forward pointers and the segment being inserted is the second segment of this type for that parent, or it is the second HDAM or PHDAM root for one anchor point.
- The segment being inserted is in an inverted structure. (The immediate parent of this segment in the logical structure is actually its physical child in the physical structure.)
- A physically paired logical child segment already exists with a sequence field equal to that of the segment you're inserting. For example, the segment could have been inserted with no duplication, but when an attempt was made to position for the insert of its physical pair, the segment had a duplicate key to an existing twin segment.
- An application program inserted a key of X'FF...FF' into a HISAM, HIDAM, or PHIDAM database.

Rather than having an abnormal termination occur, this status code is returned to the application program that issued the EXEC DLI command.

Programmer Response: User determined.

IX

Explanation: The program issued an ISRT call that violated the insert rule for that segment. Some of the reasons that IMS returns this status code are:

- The program tried to insert the logical child and logical parent, and the insert rule for the logical parent is physical and the logical parent does not exist.
- The program tried to insert the logical child and the logical parent, and the insert rule is logical or virtual and the logical parent does not exist. In the I/O area, the key of the logical parent does not match the corresponding key in the concatenated key in the logical child.
- The program tried to insert a logical child, and the insert rule of the logical parent is virtual and the logical parent exists. In the I/O area, the key in the logical parent segment does not match the corresponding key in the concatenated key in the logical child.
- The program tried to insert a physically paired segment, where both sides of the physical pair are the same segment type and the physical and logical parent are the same occurrence.
- The program issued an ISRT call to a GSAM database after receiving an AI or AO status code.

Programmer Response: Correct the ISRT or the program.

L2

Explanation: The application program needed to allocate SDEP CI RBAs to contain the application programs' insert activity for a particular AREA in the DEDB, but the request to acquire the AREA lock failed.

Programmer Response: Contact the IMS DBA or the IMS Systems Programmer.

LB

Explanation: The segment that the program tried to load already exists in the database. Other possible causes are:

- A segment with an equal physical twin sequence field already exists for the parent.
- A segment type does not have a physical twin forward pointer, and the segment being inserted is either the second segment of this segment type for the parent or the second HDAM or PHDAM root for one anchor point.
- An application program inserted a key of X'FF...FF' into a HISAM, HIDAM, or PHIDAM database.

Rather than having an abnormal termination occur, this status code is returned to the application program that issued the EXEC DLI command.

Programmer Response: Correct the `ISRT` call or LOAD command, or find out if the load sequence is incorrect. Check with the DBA or the equivalent specialist at your installation.

LC

Explanation: The key field of the segment being loaded is out of sequence.

Programmer Response: Check the segment and determine where it should be loaded.

LD

Explanation: No parent has been loaded for the segment being loaded.

Programmer Response: Check the sequence of segments that have been loaded and determine where the parent should have been loaded.

LE

Explanation: The sequence of sibling segments being loaded is not the same as the sequence that is defined in the DBD.

Programmer Response: Check and correct the sequence of the segments that are being loaded.

LF

Explanation: The source data for a logical child segment was found in the input stream of a load job for a High Availability Large Database (HALDB). Logical child segments cannot be loaded into a HALDB PHDAM or PHIDAM database. Instead, the segments must be added later in an update run.

Programmer Response: Remove all source data for logical child segments from the load job and insert them later with an update job.

LS

Explanation: The LS status means that an application program needed to allocate SDEP CI RBAs to contain the application programs' insert activity for a particular area in a Data Entry Database and the CIs could not be locked by the RLM. The application work may be committed, but some other application work may not have enough CI space, depending on how much SDEP insert work was done and the first committed application.

Programmer Response: Do a commit and be careful not to insert too many more SDEP segments.

MR

Explanation: An error was detected by the Queue Control Facility (QCF) routines on a GU, GN, ISRT, CMD, or PURG call. If the application program issuing the call is not the QCF (product 5699-E97) licensed product, then the problem is an invalid usage of the MRQPSB block. The PSB block can only be used by this product. Refer to the *IMS Version 9: Installation Volume 2: System Definition and Tailoring*, MSGQUEUE macro, MRQPSBN= parameter for information on how to specify and use the MRQPSB. If the application program is the QCF program, then the AIBRETRN code should be 000000F0.

Programmer Response: If the application program is not QCF, then use a PSB other than MRQPSB. If the application is QCF, locate the AIBREASN code and refer to the DFSMRAEQ IMS macro for information on MQR/QCF AIBREASN codes. Refer to *IMS Queue Control Facility for z/OS V1R2, Users Guide* for AIBREASN codes.

NA

Explanation: The `INIT` call with DBQUERY in the I/O area or the QUERY command was issued, and at least one of the databases that could be accessed using this PCB was not available.

A request made using this PCB will probably result in a BA status code if the `INIT` STATUS GROUPA has been issued or in a DFS3303I message and 3303 pseudoabend if it has not. An exception is when the database is not available because dynamic allocation failed. In this case, a request results in an AI (unable to open) status code.

Programmer Response: This is an information-only status code.

NE

Explanation: Indexing maintenance issued a DL/I call, and the segment has not been found. This status code is included in message DFS0840I. The system console receives message DFS0840I INDEX ERROR (*dbdname*) NE (first *45* bytes of key). The application program receives a blank status code.

An application program could have processed a secondary index as a database and thus deleted some of the secondary index entries. Subsequently, when a source segment is deleted, the secondary index for the source statement might not be present. For this reason, when the application program deletes a source segment and the index entry is not present, the DFS0840I message is sent to the system console, but a blank status code is returned to the application program.

Programmer Response: Determine whether the secondary index has been processed as a database and, as a result, the key included in the DFS0840I message was deleted. If this is not the case, check the cause for the index inconsistency with the database and correct it.

NI

Explanation: The reasons that IMS returns this status code are:

- There is a duplicate segment in a unique secondary index. While IMS was inserting or replacing a source segment for a secondary index defined with a unique sequence field, the insertion of the secondary index segment was attempted but was unsuccessful because an index segment with the same key was found. One possible cause for a duplicate segment in the index is that the index DBD incorrectly specified a unique key value—secondary index only.
- A data management open error occurred when opening the index data set.

In an online application program, the call is backed out and the program receives an NI status code.

For a batch program that does not log to the IMS DASD log, IMS abnormally terminates the program with a U0828 abend. You should run batch backout.

Programmer Response: The response is determined by the user. If duplicate secondary index entries occur, specify the index as non unique, and provide an overflow entry-sequenced data set. If an open error occurred, examine message DFS0730I for the cause of the open error.

NL

Explanation: The application program issued an extended checkpoint call. Checkpoint information is written to the log data set, but there is no DD statement in the batch step for the log, so no checkpoint was written. The DD name for the log data set is IEFRDER. Although no checkpoint information was written, normal commit processing was performed.

Programmer Response: Provide an IEFRDER DD statement. No status is returned for a DD DUMMY statement.

NO

Explanation: A BSAM or VSAM physical I/O error occurred during a database request that is issued by the index maintenance function.

For an online program, all updates made for the call are backed out and the application program receives the NO status code. For a batch program that does not log to the IMS DASD log, IMS abnormally terminates the program with an 826 abend.

Programmer Response: See accompanying messages giving details of the error. In a batch environment, run batch backout.

NU

Explanation: An ISRT, DLET, or REPL request using this PCB might result in a BA status code if the INIT STATUS GROUPA call or QUERY command has been issued or in a DFS3303I message or 3303 pseudoabend if it has not. If the unavailable database is only required for delete processing, it is possible that the ISRT and REPL requests can be processed.

Programmer Response: This is an information-only status code.

OS

Explanation: The OS status indicates that the STOPRBA parameter value given for the DEDB Sequential Dependent Scan Utility is too large for the current sequential dependent CI set.

Programmer Response: Check the parameter value for validity and use a correct value or use the utilities default value for the scan end.

QC

Explanation: There are no more messages in the queue for the program. The reasons that IMS returns this status code are:

- An application program issued a successful CHKP call, but the message GU call issued internally by the CHKP call was unsuccessful (that is, it did not return a message).
- An application program processing APPC synchronous messages that does not set sync points for each message GU call (that is, mode=MULT on the TRANSACT macro) is returned a QC status code to force a sync point after each GU call.

For more information regarding the TRANSACT macro, refer to *IMS Version 9: Installation Volume 2: System Definition and Tailoring*.

- An MPP or transaction-oriented BMP issued a GU call to retrieve another message, but either there are no more messages or the processing limit (that is, PROCLIM=parm on the TRANSACT macro) has been reached.
- IMS is shutting down or:
  - A /PSTOP REGION command has been issued for the dependent region in which the application program is processing.
  - A database dump (/DBD) command has been issued.
  - A database recovery (/DBR) command is in operation.
  - A stop subsystem (/STOP SUBSYS) command has been issued.

    For more information regarding these commands, refer to *IMS Version 9: Command Reference*.
- IMS wants to reschedule the region (quick reschedule). For more information regarding quick reschedule, refer to *IMS Version 9: Administration Guide: System*.

Programmer Response: This is an information-only status code. The application program should terminate.

QD

Explanation: The program issued a message GN or GCMD call, but there are no more segments for this message.

Programmer Response: Process the message.

QE

Explanation: The program issued a message GN call before issuing a GU call to the message queue. In message-driven Fast Path programs, this code applies to message calls only. The program issued a message GN call before issuing a GU call to the message queue. In message-driven Fast Path programs, this code applies to message calls only. This code is also returned when a program issues a ROLB call, specifying the I/O area parameter, without having issued a successful message GU call during that commit interval. A message-driven Fast Path program issued a CHKP call to establish an internal GU call but the CHKP call failed with a status QC code. A successful GU call was never issued during the commit interval for the failing CHKP call. Information only status code for calls encountering SDEP full or FLD verify failures which are reprocessed using ROLB.

Programmer Response: Correct the program by:

- Issuing a GU call before the GN call
- Issuing a CMD call before the GCMD call
- Issuing a GU call before the ROLB call

QF

Explanation:

- If in a non-shared queues environment, segment length is less than five characters (segment length is message text length plus four control characters).
- If in a shared queues environment and the application program ISRT(s) results in a message that spans multiple queue buffers, the second and subsequent buffers are PUT to the shared queues. If the shared queues are full and those CQS PUTs are rejected, this results in a STATUSQF being passed back to the application program.

Programmer Response:

- If a non-shared queues environment, correct the segment and issue a ROLB to back out any incomplete data.
- If a shared queues environment, follow the procedure to increase queue size.

QH

Explanation: There has been a terminal symbolic error. The output logical terminal name or transaction code is unknown to IMS. Some reasons for receiving this status code are:

- The program tried to insert an alternate response PCB receiving a QC status code for a GU call.
- The program tried to insert to an I/O PCB that has a logical terminal name of blanks. This could occur after the program issued a GU call for a message that originated either from a batch-oriented BMP or a CPI Communications driven program.
- SMB or CNT could not be found.
- The program deallocated a conversation with a SETO call with the DEALLOCATE_ABEND option. Any subsequent ISRT calls are rejected with this status code.
- The program issued an ISRT call without first issuing a GU call.
- The logical terminal name or transaction code specified is Fast Path exclusive and is not available to this program.
- The program issued an ISRT call for a segment shorter than 5 bytes.
- The program issued an ISRT call for a SPA shorter than 6 bytes.
- The logical terminal name or transaction code has leading blanks, instead of being left-justified.

Programmer Response: Check the logical terminal name or transaction code, and correct it.

RA

Explanation: The token does not match a token for any outstanding SETS requests or the request was issued for a database PCB that did not get a BA status on the previous request.

Programmer Response: The outstanding SETS request might have been canceled by a commit process, or an error exists in the use of the token.

RC

Explanation: The ROLS call was issued with unsupported PCBs in the PSB, or the program is using an attached subsystem. If the ROLS call is in response to a SETS call, the call is rejected. If the ROLS call is in response to a SETU call, the call is processed, but updates to unsupported PCBs or an attached subsystem are not backed out. This status is only returned for a ROLS call in response to a SETU call if an attached subsystem is being used.

Programmer Response: User determined.

Explanation: The ROLS request was rejected because the PSB contains access to a DEDB, MSDB, or GSAM organization or has access to an attached subsystem.

Programmer Response: The ROLS request is invalid in this environment. The program must either remove the use of the database organization that is preventing the use of the ROLS call or not use the ROLS call.

RX

Explanation: The program issued a REPL that violated the replace rule for that segment.

Programmer Response: Correct the REPL call, or check with the DBA or the equivalent specialist at your installation.

SA

Explanation: On a SETS request, IMS was not able to obtain the storage space for the data in the I/O area.

Programmer Response: Use a larger region size for the job step.

SB

Explanation: The maximum number of levels, nine, of SETS requests were already specified, and this request is attempting to set the tenth.

Programmer Response: Correct the program.

SC

Explanation: A SETS or SETU call was issued with unsupported PCBs (DEDB, MSDB, or GSAM) in the PSB, or the program is using an attached subsystem.

Programmer Response: For a SETS call, the request is rejected. Remove the unsupported PCBs or use the SETU call. For a SETU call, the program can proceed with the knowledge that a ROLS call will not back out changes for the unsupported PCBs. The other option is to not use the SETS or ROLS function.

SY

Explanation: IMS incurred an internal error during Syncpoint processing for an IMS Java SYNC request call.

Programmer Response: Contact your IMS system programmer.

TA

Explanation: This status code applies to CICS online command-level programs only, and it is returned following a scheduling request. The PSB named in the request is not in the PSB directory.

Programmer Response: Correct the name of the PSB in the scheduling request, or add the PSB name to the PSB directory.

TC

Explanation: This status code applies to CICS online command-level programs only, and it is returned following a scheduling request. It means that you have already scheduled a PSB.

Programmer Response: Correct your program so that you terminate a PSB before scheduling another. If you want to reschedule a PSB, you must have already terminated the PSB.

TE

Explanation: This status code applies to CICS online command-level programs only, and it is returned following a scheduling request. The PSB could not be scheduled because an initialization error occurred.

Programmer Response: See your system programmer or DBA. For information on possible causes for the PSB initialization error, see *IMS Version 9: Application Programming: Database Manager*.

TG

Explanation: This status code applies to CICS online command-level programs only, and it is returned following a terminate request. The program issued a terminate request when there was no PSB scheduled.

Programmer Response: This is an information-only status code. If you only wanted to terminate a PSB, continue with processing. If you also wanted to cause a sync point, issue a SYNCPOINT command. (No sync point was caused by the unsuccessful terminate request.)

Rather than having an abnormal termination occur, this status code is returned to the application program that issued the EXEC DLI command.

TH

Explanation: This status code applies to CICS online command-level programs only, and it is returned following a database request or a statistics request. The program attempted to access the database before scheduling a PSB.

Programmer Response: Correct your program, and schedule a PSB before accessing the database.

TI

Explanation: This status code applies to command-level programs only, and it is returned after an `ISRT` command. The `ISRT` command defined an invalid path to the segment. Data must be transferred for all segments between the first named segment and the last named segment.

Programmer Response: Correct the ISRT command, specifying a FROM option for each segment to be transferred.

TJ

Explanation: This status code applies to CICS online command-level programs only, and it can be returned after any command that a CICS online program uses. DL/I is not active.

Programmer Response: Contact your DBA. CICS must be reinitialized with DL/I defined as active in the SIT.

TL

Explanation: This status code applies to CICS online command-level programs only, and it is returned after a scheduling request. A conflict in scheduling intent occurred. (This cannot occur if program isolation has been specified.)

Programmer Response: Specify program isolation in the SIT. If program isolation has not been specified, wait until the PSB is no longer in use, and reschedule it.

TN

Explanation: This status code applies to command-level programs only, and it can be returned after any of the commands. An invalid SDIB exists. An initialization call was not made, or the system's DIB (not the application program's DIB) was overlaid.

Programmer Response: Check your program to make sure that you did not use an entry statement, as you would in a call-level batch program. Also make sure that no addressing errors are in your program that would cause an overlay.

TO

Explanation: This status code applies to command-level programs only, and it is returned following a `REPL` command. A path-replace error occurred. The segments to be replaced are compared to the previous Get command and one of the following situations occurred:

- A segment is named to be replaced that was not retrieved by the Get command.
- Data had not been transferred (no INTO option) for this segment on the Get command.
- The attributes of the data to be transferred do not match the data in the database.

Programmer Response: Correct the program.

TP

Explanation: This status code applies to command-level programs only, and it is returned following any of the database commands, a LOAD command, or a statistics request. The number of the PCB specified in the USING option is higher than the number of PCBs in the PSB being used, or an invalid processing option was specified. For example, the program tried to issue a LOAD command without having the L processing option specified in its PSB.

An EXEC DLI command is being attempted against a GSAM PCB. This is invalid.

Programmer Response: Check the PSB and correct your program.

TR

Explanation: This status code means that the CICS XDLIPRE exit routine returned X'04' in register 15 because the routine determined that the immediately preceding DL/I request should not be executed.

Programmer Response: Contact the CICS system programmer.

TY

Explanation: This status code applies to CICS online command-level programs only, and it is returned following a database or statistics request. The database was not open when the request was issued.

Programmer Response: Contact your DBA or system programmer. The database can be checked and opened by using operator commands.

TZ

Explanation: This status code applies to CICS online command-level programs only, and it is returned following a database or statistics request. The length of the retrieved segment is greater than 64 KB.

Programmer Response: Contact your DBA or system programmer; the database definition might require modification.

UB

Explanation: This status code is returned when IMS is unable to obtain private buffer pool.

Programmer Response: No DFS0535I message is issued if the High Speed Reorganized Utility (HSRE) is being used when this status code is received. See the DFS2712I messages issued at utility termination for the name of the module, abend subcode, Utility High Speed Workarea (UHSW) storage area dump, IOAR (DEDB I/O), and register contents.

If the DBFPAPB0 return code is 08, storage is not available for the private buffer pool.

If the DBFHUSS0 return code is 10, the request for private buffers is for the initial buffer set and the private pool anchor address already exists.

UC

Explanation: This status code is returned for the following reasons:

- For batch programs in which a checkpoint record was written to the UCF journal data set. For information about the Utility Control Facility (UCF), see *IMS Version 9: Administration Guide: Database Manager* and *IMS Version 9: Utilities Reference: Database and Transaction Manager*.

  During the processing of an HD reorganization, a reload, or an initial load program under the supervision of the Utility Control Facility (UCF), a checkpoint record was written to the UCF journal data set. IMS returns this status code to indicate that the last `ISRT` call was correct and the initial load program might continue or it might perform a checkpoint procedure before continuing.
- When a connect failed.

Programmer Response: This is an information-only status code for the first status code reason above.

When this status code is issued for a connect failure, see message DFS0535I for more information on how to correct the error.

UP

Explanation: This status code is returned when the UOW requested is greater than the UOW range.

Programmer Response: Correct the error and run the job again.

UR

Explanation: This status code is returned for batch programs only. Your initial load program is being restarted under UCF. For information about the Utility Control Facility (UCF), see *IMS Version 9: Administration Guide: Database Manager* and *IMS Version 9: Utilities Reference: Database and Transaction Manager*. The program terminated while executing under UCF. The job was resubmitted with a restart request.

Programmer Response: Ensure that the program is in proper sequence with database loading. The program uses the I/O area and the DB PCB key feedback area to do this.

US

Explanation: This status code is returned for batch programs only. The initial load program is about to stop processing. While processing an HD reorganization reload or user initial load program under the supervision of UCF, the operator replied to the WTOR from UCB and requested the current function to terminate. For information about the Utility Control Facility (UCF), see *IMS Version 9: Administration Guide: Database Manager* and *IMS Version 9: Utilities Reference: Database and Transaction Manager*. The last `ISRT` call was processed.

Programmer Response: Ensure that the initial load program performs a checkpoint procedure of its data sets and returns with a nonzero value in register 15.

UW

Explanation: This status code is returned when IMS is unable to obtain a work area.

Programmer Response: Increase the REGION size and run the job again.

UX

Explanation: This status code is returned for batch programs only. A checkpoint record was written, and processing stopped. This is a combination of UC and US status codes.

Programmer Response: See the descriptions of UC and US status codes.

U1

Explanation: This status code is returned when the area name specified is not valid.

Programmer Response: Correct the error and run the utility job again.

U9

Explanation: This status code is returned when the area access intent is read or read only. Access intent must be UP or EX.

Programmer Response: Use the `/START DB ACCESS` or `UPDATE DB START(ACCESS) SET(ACCTYPE())` command to set the access intent to UP or EX and run the job again.

V1

Explanation: The program tried to insert or replace a variable-length segment that is too long. The length of the segment must be equal to or less than the maximum length specified in the DBD. IMS also returns status code V1 when the specified minimum length cannot hold the complete sequence field of the segment type. In this situation, status code V1 results from one of three instances: processing without an edit/compression routine; processing with an edit/compression routine, but not specifying the key compression option; or coding a length field (LL) that is less than the specified minimum length. The length must be long enough to include the entire reference field; if the segment is a logical child, it must include the entire concatenated key of the logical parent and all sequence fields for the paired segment. The program tried to delete a variable-length segment. The copy of this segment in the user's I/O area contains an invalid length field.

IMS also returns this status code when an invalid record length is specified in a GSAM call.

Programmer Response: Correct the program.

V2

Explanation: This status code applies to command-level programs only, and it is returned following a database or LOAD command. The segment length is missing or invalid. The segment length must be a positive integer. For variable-length segments, it is the maximum size acceptable to the program's I/O area.

Programmer Response: Check that the program translated and compiled correctly. The value of any segment length in a path command should not exceed 32 KB, and the sum of the lengths should not exceed 64 KB.

V3

Explanation: This status code applies to command-level programs only, and it is returned following a Get or `ISRT` command. The field length is missing or invalid. The field length must be a positive integer, and it must be specified for each field in a WHERE option.

Programmer Response: Correct the program.

V4

Explanation: This status code applies to command-level programs only, and it is returned following any of the database commands or a LOAD command. The length of a variable-length segment is invalid. The LL field as provided by the program on an `ISRT` or `REPL` command, or as received in the I/O area on a Get command, exceeds the value of SEGLENGTH.

Programmer Response: Correct the program.

V5

Explanation: This status code applies to command-level programs only, and is returned following a Get, `REPL`, or `ISRT` command. The offset is invalid. The offset must be a positive integer and not greater than the segment length.

Programmer Response: Correct the program.

V6

Explanation: This status code applies to command-level programs only, and it is returned following a Get or `ISRT` command using the KEYS option. The concatenated key length is missing or invalid. The length of the concatenated key must be a positive integer.

Programmer Response: Correct the program.

V7

Explanation: This status code applies to command-level programs only, and is returned following a `STAT` command. It means that the statistics area length is either too small or invalid. The length must be a positive integer, and it must be at least 72 bytes for unformatted statistics, 120 bytes for summary statistics, and 360 bytes for formatted statistics.

Programmer Response: Correct the program.

XA

Explanation: The program tried to continue processing the conversation by passing the SPA to another program through a program-to-program

message switch after already responding to the terminal.

Programmer Response: If a response has been sent, the SPA should be returned to IMS. Correct the program.

XB

Explanation: The program has passed the SPA to another program but is trying to respond to the originating terminal.

Programmer Response: No response is allowed by a program that is passed control of the program through a program-to-program message switch.

XC

Explanation: The program inserted a message that has some bits in the Z1 field set. The Z1 field is reserved for IMS.

Programmer Response: Correct the program to prevent it from setting those bits.

XD

Explanation: IMS is terminating by a CHECKPOINT FREEZE or DUMPQ. IMS returns this code to a BMP that has issued a `CHKP` or `SYNC` call. If it is a transaction-oriented BMP, IMS does not return a message.

IMS also returns XD when a batch program issues a `SYNC` call.

Programmer Response: Terminate the program immediately. IMS will terminate the program abnormally if the program issues another call.

XE

Explanation: A program tried to insert a SPA to an alternate express PCB.

Programmer Response: Regenerate the PSB and remove the EXPRESS=YES option from the PCB, or define another non-express PCB to be used in the `ISRT` call.

XF

Explanation: IMS is ignoring the `ISRT` call for the SPA, because the specified alternate PCB had its destination set to a logical terminal but was not defined as ALTRESP=YES during PSB generation.

MSC directed routing does not support a program-to-program switch between conversational transactions.

Programmer Response: Correct the application program or change the PSB generation for that alternate PCB to specify ALTRESP=YES.

XG

Explanation: IMS ignored the `ISRT` call because the current conversation requires a fixed-length SPA, and the ISRT call was to a program with a different length or variable-length SPA, while the source IMS system was earlier than IMS 6.1. If the SPA `ISRT` on a remote system is not going back to the input terminal (IOPCB), the SPA size must be the same as the size of the current one, if the source IMS system is earlier than IMS 6.1.

Programmer Response: Correct the program or the SPA definitions.

XX

Explanation: An error occurred during GSAM initialization or during GSAM call processing. If this status code is in the GSAM PCB before the application program issued the first call, the error was detected during initialization. Possible causes are:

- Insufficient space
- Invalid DBD
- Invalid block size
- Invalid option
- Internal GSAM error

Programmer Response: A subsequent GSAM call will result in an abnormal termination of the program. The program should terminate.

X2

Explanation: The first `ISRT` call to an alternate PCB whose destination is a conversational transaction code is not for the SPA. The SPA must be inserted with the first `ISRT` call.

Programmer Response: Insert the SPA, and then reinsert the message segment.

X3

Explanation: The program modified the first 6 bytes of the SPA; the SPA is now invalid.

Programmer Response: Correct the program and restore the original bytes.

X4

Explanation: The program issued an `ISRT` call to pass the SPA to a nonconversational transaction code. It did this by referencing a PCB whose destination was set for the nonconversational transaction code. You can send the SPA only to transaction codes that are defined as conversational.

Programmer Response: Correct the ISRT call. Send only data segments.

X5

Explanation: The program issued more than one ISRT call to send the SPA to a PCB whose destination is a transaction code. Only one SPA is allowed per message.

Programmer Response: Correct the program.

X6

Explanation: An invalid transaction code name was inserted into the SPA. This will occur if the input is from LU 6.2 (APPC) or OTMA and if a dynamic control block was built for the transaction code.

Programmer Response: Correct the program to set the proper transaction code name.

X7

Explanation: The length of the SPA is incorrect. The program modified the first 6 bytes.

Programmer Response: Correct the SPA and the program.

X9

Explanation: The length of the SPA is greater than the size of the PSB I/O area.

Programmer Response: Correct the length of the SPA or the size of the PSB I/O area in the PSBGEN.

---

blanks (bb)

Explanation: The call was completed.

Programmer Response: Proceed with processing.

Appendix F. DBCTL Return Codes

In this section:

- "DBCTL DRA Return Codes"
- "Reason Codes from DRA to the Control Exit" on page 652

DBCTL DRA Return Codes

Two entities can access an IMS database through the DRA. These entities are a CCTL and an ODBA application program using an ODBA interface. Unlike a CCTL, the ODBA interface does not use the PAPL parameter list. The ODBA interface uses the AERTDLI interface to communicate its requests to the DRA. Therefore, this section does not apply when ODBA is used. For ODBA return codes, see *IMS Version 9 Application Programming: Database Manager*.

The coordinator controller initiates a request to connect to the Database Control Subsystem (DBCTL). The Database Resource Adapter (DRA) establishes and maintains the connection to DBCTL and handles all communication between the CCTL and DBCTL. Once the connection has been established, the DRA is ready to process requests from the CCTL for DBCTL services. The CCTL uses a parameter list called the DFSPAPL to communicate its requests to the DRA. (For the layout of DFSPAPL, see *IMS Version 9: Customization Guide*.) DBCTL responds to requests from the CCTL with a code in field PAPLRETC of DFSPAPL that tells whether or not the request was successfully completed. The format of PAPLRETC is *hhsssuuu*, where *hh* indicates a system abend, user abend, or DBCTL return code.

hh **Meaning**

80 Either a system abend code or an IMS user abend code was returned: *sss* contains the system abend code and *uuu* contains the IMS user abend code (in hexadecimal). Either *sss* **or** *uuu* contains a code; the other field contains zeros. For an explanation of system abend codes, see *z/OS MVS System Codes*. For user abend codes, see Chapter 4, "IMS Abend Codes, 0002 - 2991," on page 39 and Chapter 5, "IMS Abend Codes 3000 - 4095," on page 141.

For system or user abend codes, DBCTL usually dumps (SDUMP or SNAP) storage for diagnosis. However, if DBCTL determines that a dump (SDUMP or SNAP) is not necessary, it sets *hh* to X'88'. But if a SNAP (not an SDUMP) is desired, then it sets *hh* to X'84'. For more information about DRA dumps, see *IMS Version 9: Diagnosis Guide and Reference*.

When a Fast Path prepare call fails, DBCTL returns a status code in field PAPLSTCD in addition to the user abend code 35 in PAPLRETC.

00 A hexadecimal DBCTL return code was returned in field *uuu*. These codes are explained in the table below. Be aware that the table lists codes in decimal, so you must convert the hexadecimal value to decimal before using the table.

The following topics contain additional information:

- "Return Codes from Requests under the DRA and THREAD Functions"
- "Return Codes from Requests under the DRA Function" on page 650
- "Return Codes from Requests under the THREAD Function" on page 651

Return Codes from Requests under the DRA and THREAD Functions

All requests under the DRA and THREAD functions receive these return codes:

Return Code	Meaning
0	Request completed successfully.
4	Invalid function requested.

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Return Codes from Requests under the DRA Function

INIT Request

Return Code	Meaning
8	GETMAIN failure trying to obtain required DRA storage.
12	Dynamic allocation of DRA RESLIB failed.
16	OPEN of DRA RESLIB failed.
20	ATTACH of the DRA TCB failed.
36	Required parameters not specified correctly.
48	LOAD of required DRA module failed.
72	The DRA RESLIB is not authorized.
76	The load of the DRA startup table (DFSPZPxx) failed.

TERMINATE Request

Return Code	Meaning
8	GETMAIN failed.
40	No active communication with DBCTL.
44	Invalid call token. Either the PAPLCTOK pointer was zero, or it did not contain the address of a valid call token.
213	Upon termination, there is at least one unit of recovery in doubt. A Recoverable Indoubt Structure (RIS) is built for each in-doubt unit of recovery. Termination is completed.
214	There might be an in-doubt unit of recovery upon termination, but DBCTL is not available.

RESYNC Request

Return Code	Meaning
24	CCTL storage was damaged. Unable to find thread service routine master control block (PAT).
40	No active communications with DBCTL.
44	Invalid call token. Either the PAPLCTOK pointer was zero or it did not contain the address of a valid call token.
68	Invalid resync action requested.

PURGE Request

Return Code	Meaning
24	CCTL storage was damaged. Unable to find thread service routine master control block (PAT).
28	Unable to find the thread for purge.
40	No active communications with DBCTL.
44	Invalid call token. Either the PAPLCTOK pointer was zero, or it did not contain the address of a valid call token.
232	Invalid address of thread TCB for PURGE request.

Return Codes from Requests under the THREAD Function

All requests under the THREAD function receive this return code.

Return Code	Meaning
68	Invalid thread request.

SCHEDULE/UNSCHEDULE Request

Return Code	Meaning
24	CCTL storage was damaged. Unable to find the thread service routine master control block (PAT).
28	PSB is not scheduled for an unschedule request.
32	Thread is already scheduled for a schedule request.
40	No active communications with DBCTL.
44	Invalid call token. Either the PAPLCTOK pointer was zero or it did not contain the address of a valid call token.
52	Invalid recovery token. Field PAPLRTOK was zero.
56	Language parameter (PAPLALAN) not specified.
60	PSB parameter (PAPLPSB) not specified.
201	PSB stopped or locked.
202	Database stopped or locked in DEDB.
203	I/O error in reading PSB or data management block.
205	data management block, PSB, or PSBW pool too small.
206	Schedule failed because of a stop region command.
207	Invalid processing option L or LS.
208	Fast Path buffer page fix error.
209	Invalid processing intent.
210	Database authorization failure.
211	The recovery token is not unique, or the CCTL ID portion of the recovery token does not match the USERID.
212	The recovery token passed is zeros.

DL/I Request

Return Code	Meaning
24	CCTL storage was damaged. Unable to find the thread service routine master control block (PAT).
28	No thread connection.
40	No active communications with DBCTL.
44	Invalid call token. Either the PAPLCTOK pointer was zero or it did not contain the address of a valid call token.
56	Language parameter (PAPLALAN) not specified.
64	DL/I call list (PAPLCLST) not specified.

221	A DL/I request was issued, but the thread is not primed with a recovery token. The user might have failed to issue the PTOK request after a sync point HOLD request.

SYNCPOINT Request

Return Code	Meaning
24	CCTL storage was damaged. Unable to find the thread service routine master control block (PAT).
28	No thread connection.
40	No active communications with DBCTL.
44	Invalid call token. Either the PAPLCTOK pointer was zero or it did not contain the address of a valid call token.
52	Invalid recovery token. The PAPLRTOK was zero, PAPLNRTK was zero on a CONTinue call, or PAPLRTOK=PAPLNRTK.
200	A PSB schedule is terminated at the end of sync point because a `/DBD` or `/DBR` command was issued, IRLM failed, or communication with IRLM failed.
218	For a RESYNC request, the recovery token is unknown to DBCTL.

PRIME RECOVERY TOKEN (PTOK) Request

Return Code	Meaning
24	CCTL storage was damaged. Unable to find the thread service routine master control block (PAT).
28	No thread connection.
40	No active communications with DBCTL.
44	Invalid call token. Either the PAPLCTOK pointer was zero or it did not contain the address of a valid call token.
52	Invalid recovery token. The PAPLRTOK was zero.

TERMINATE THREAD Request

Return Code	Meaning
24	CCTL storage was damaged. Unable to find the thread service routine master control block (PAT).
28	No thread connection.
40	No active communications with DBCTL.
44	Invalid call token. Either the PAPLCTOK pointer was zero or it did not contain the address of a valid call token. Thread is terminated.
210	A CCTL subsystem issued an UNSCHEDULE call or a TERMINATE THREAD call to the DBCTL subsystem.

Reason Codes from DRA to the Control Exit

The DRA notifies the CCTL of asynchronous events (for example, a DRA failure, an identify failure, a DBCTL termination, and so on) by driving the Control Exit, a routine supplied by the CCTL. The DRA passes control to this exit using the PAPL as the standard parameter list to pass information. The CCTL responds to notification of the event by passing back a return code in field PAPLRETC that tells the DRA what action to perform. The DRA then performs the requested action.

Use Table 143 to determine what asynchronous event occurred, what actions the CCTL can ask the DRA to perform in response to the event, and what actions the DRA performed. The combination of codes in the first four columns specifically define the asynchronous event. For example,

- PAPLFUNC=05 (column 1) indicates that some failure occurred.
- PAPLSFNC=01 (column 2) further defines this failure as an identify failure.
- PAPLRETC=8 (column 3) and PAPLRCOD=08 (column 4) define the failure precisely, indicating that the identify failure occurred in MVS SSI and that DBCTL is not active.

The last column contains both the return code that the CCTL passes to the DRA (in field PAPLRETC) to tell the DRA how to respond to the asynchronous event, and the action the DRA performs (DRA Actions). To interpret the return codes and determine DRA actions, refer to the notes following the table.

The first 4 columns in the table are fields in the DFSPAPL. They contain:

PAPLFUNC Function

PAPLSFNC Subfunction

PAPLRETC Return Code

PAPLRCOD Reason Code

Table 143. Asynchronous Event Code Table

PAPL FUNC	PAPL SFNC	PAPL RETC	PAPL RCOD	Event That Invoked Control Exit	CCTL Response and DRA Actions
05 Some Failure occurred.					
	01 Identify failed. DBCTL not ready to connect.				0, 4, 8 See note 1 on page 654
		8	08	Failure in MVS SSI. DBCTL is not active.	
		12	09	Failure in MVS SSI. DBCTL does not exist.	
		12	10	DBCTL is in initialization process.	
		12	11	DBCTL completed initialization and is waiting for restart command.	
		12	12	DBCTL is in restart process.	
		12	13	XRF alternate is in tracking mode.	
		12	14	XRF alternate is in takeover mode.	
		12	37	DBRC is not in share control mode.	
	02 Identify process is canceled.				0, 4 See note 2 on page 655.
		N/A	04	z/OS console operator canceled the CCTL request to wait until DBCTL becomes active. See note 1 on page 654, code 0.	
		IMS user abend code	05	DBCTL returned a user abend code.	
	03 DBCTL is terminating.				0, 4, 8 See note 6 on page 655.
		N/A	02	The connected DBCTL terminated abnormally.	
	04 DRA failed.				No response. DRA terminated.
			01	A DRA function request failed in MVS SSI.	

Table 143. Asynchronous Event Code Table (continued)

PAPL FUNC	PAPL SFNC	PAPL RETC	PAPL RCOD	Event That Invoked Control Exit	CCTL Response and DRA Actions
		z/OS return code		Identify request failed (from DFSPRA10). SSI return code is not 8 or 12.	
		40		Resync request failed (from DFSPRA20).	
		40		Purge thread request failed (from DFSPRA50).	
		z/OS return code	03	Identify request failed in allocating DRA storage (from DFSPRA10).	
		z/OS return code	06	Establish DRA ESTAE failed (from DFSFPRA0).	
		See notes 4 on page 655 and 5 on page 655.	07	DRA terminated abnormally (from DFSFPRA0).	
		See note 4 on page 655.	15	DRA terminated at the request of the Control Exit after DBCTL failed or the operator entered a `/CHE FREEZE` command.	
	05 DBCTL is shutting down.				0, 4, 8 See note 1.
		N/A	N/A	The operator entered a `/CHE FREEZE` command for DBCTL.	
	02 Resynchronization				0, 4 See note 3 on page 655.
	N/A	N/A	N/A	Identify process completed. A recovery token list for all in-doubt units of recovery is passed to CCTL in field PAPLILST.	

Notes:

1. The CCTL responds to the DRA by passing a return code (0, 4 or 8) in field PAPLRETC. This return code tells the DRA what action to perform. The DRA then performs the action requested.
   - 0 - Retry the connection.

     DRA writes message DFS690A to the z/OS console to indicate that IMS control or DBCTL region is not active. The z/OS console operator can respond with 'wait' or 'cancel'.

     If the operator enters 'wait', the DRA sets a timer for issuing the next identify call. Each call is analyzed and processed just like the first call.

     If the operator enters 'cancel', the DRA invokes the Control Exit with **reason code** 04. (Refer to note 2 on page 655 for possible response and action.)
   - 4 - Proceed with termination.

     The DRA proceeds with termination and will not call the Control Exit again. The CCTL might delete the Control Exit at this time.
   - 8 - Identify to another DBCTL whose ID is in PAPLDBCN.

     The DRA issues the identify call to the designated DBCTL and processes the result just like the first identify call.

2. The CCTL responds to the DRA by passing a return code (0 or 4) in field PAPLRETC. This return code tells the DRA what action to perform. The DRA then performs the action requested.
   - 0 - Wait for the CCTL to send a DRA terminate request.

     The DRA waits for the CCTL to send the terminate request.
   - 4 - Proceed with termination.

     The DRA proceeds with termination.
3. After the identify is complete, the CCTL responds to the DRA for resynchronization by passing a return code (0 or 4) in field PAPLRETC. This return code tells the DRA what action to perform. The DRA then performs the action requested.
   - 0 - The CCTL acknowledges the success of identify and waits for requests from its subsystems.

     The DRA waits for a call from CCTL.
   - 4 - Proceed with termination.

     The DRA proceeds with termination and will not call the Control Exit again. The CCTL might delete the Control Exit at this time.
4. PAPLRETC contains the same information as it does for a terminate request.
5. PAPLACDE contains the abend code, if any.
6. DBCTL is terminating.
   - 0 - The DRA waits for the TERM request from the CCTL.
   - 4 - The DRA termination completed. The next request from the CCTL must be INIT.
   - 8 - The DRA issues an identify request to DBCTL, using the PAPLDBCN value if is was supplied by the Control exit routine.

Appendix G. Transport Manager Interface Functions and Return Codes

In this section:

- "IDENTIFY Function"
- "ALLOCATE Function" on page 658
- "ACCEPT Function" on page 659
- "SEND Function" on page 659
- "DEALLOCATE Function" on page 659
- "FORGET Function" on page 660
- "QUERY Function" on page 660
- "Transport Manager STATUS Exit Return Codes" on page 660

IDENTIFY Function

Return Code (Hex)	Function and Description
0	IDENTIFY initiated
	Completion is indicated by a status exit with "identify_complete".
4	Entity name in use
	The entity name is currently in use or a reserved name was used.
8	Resource failure

Reason Code (Hex)	Description
4	Storage shortage
8	VTAM storage shortage
C	VTAM APPLID not available
10	VTAM not available
14	TMS instance not available
	The Transport Manager instance specified by TMSNAME (or defaulted) is not available.
18	Failure during activation
1C	Abend during IDENTIFY
	Abnormal termination occurred during IDENTIFY processing.
20	MVS RESMGR failure
	Nonzero return code was passed back from the MVS RESMGR macro.

Return Code (Hex)	Function and Description
C	Environment error

Reason Code (Hex)	Description
4	User not key 7 or supervisor state
8	TMS code not accessible or wrong level

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The Transport Manager code cannot be loaded or is at the wrong level.

C SETLOGON request failure

A VTAM SETLOGON request failed.

10 Link to ELXUIID0 failed

An MVS LINK macro (to module ELXUIIDC) failed.

10 One of two situations occurred:

- Unusual VTAM OPEN failure
- OSAM Coupling Facility Structure Name Error

Unusual VTAM OPEN failure

The value from the ACB error field is in ACBERFLG. Some of these failures are caused by VTAM definition errors or operational errors.

Reason Code (Hex)	Description
nn	Refer to VTAM ACBERFLG values The decimal value of reason code *nn* can be found as ACBERFLG in the ACB DSECT (IFGACB). Refer to the *z/OS V1R1.0 and OS/390 V2R10.0 IBM Communications Server SNA Programming* for the meaning of ACBERFLG.

OSAM Coupling Facility Structure Name Error

The job or subsystem receiving this error did not specify (defaults to blanks) or incorrectly specified the OSAM coupling facility structure name. Check your CFOSAM= definition against one or both of the following:

- The coupling facility policy definition
- The structure name being used by other subsystems in this data sharing environment

For more information on the CFOSAM= parameter of CFNAMES control statement for member DFSVSMxx, see the *IMS Version 9: Installation Volume 2: System Definition and Tailoring* manual; you can also find information in this manual for defining coupling facility structure names for sysplex data sharing.

14 Invalid parameter

At least one parameter value is invalid.

Reason Code (Hex)	Description
4	ASCTOK is invalid
8	TMSNAME is invalid TMSNAME is invalid. Only one name per ASCTOK is allowed.

ALLOCATE Function

Return Code	Function and Description
0	Normal completion. Normal completion, conversation request is proceeding. A status exit routine is driven to indicate completion of the request.
8	Resource failure.

Reason Code	Description
4	Storage shortage
12	CTOK shortage

16 Transport Manager address space unavailable, this function cannot be initialized. A status exit routine is driven indicating this fact.

20 Invalid parameter.

At least one parameter value is invalid.

Reason Code	Description
0	IDTOKEN is invalid
4	BUFFER is invalid

ACCEPT Function

Reason Code	Function and Description
0	Accept initiated. Accept initiated. The conversation is operational or has failed through the status exit routine with “accept_complete” reason code.
16	Transport Manager is no longer available. A status exit routine is driven indicating this fact.
20	Invalid parameter.

Reason Code	Description
0	IDTOK is invalid
4	BUFFER specifications is invalid
8	CTOK is invalid
12	Conversation state invalid for ACCEPT function

SEND Function

Reason Code	Function and Description
0	Data accepted for transport.
4	Filter routine filtered all data, nothing was sent.
8	Temporarily unable to transport, all buffers are busy. ECB was specified.
12	All send buffers are busy, unable to send, no ECB was provided.
16	The conversation is no longer available. A status exit routine is driven indicating this fact.
20	Invalid input parameter.

Reason Code	Description
0	CTOKEN was invalid
4	Length or PDR length was invalid
8	`MF=R` invalid for parameter list

DEALLOCATE Function

Reason Code	Function and Description

0	DEALLOCATE initiated. If the deallocate is in response to an status exit routine “allocate_request” or a status exit conversation_deallocated, you can consider deallocation complete.
16	The Transport Manger is no longer available. A status exit routine is be driven indicating this fact.
20	Invalid request. You had already issued `DEALLOCATE` or the conversation never completed allocation.

FORGET Function

Reason Code	Function and Description
0	FORGET completed
4	At least one conversation is not completely deallocated
8	FORGET already in progress or invalid IDTOKEN
12	An MVS LINK macro (to module ELXUIFOC) failed

QUERY Function

Reason Code	Function and Description
0	QUERY initiated The user status exit routine is driven.
16	Transport Manager address space is unavailable, this function cannot be initiated

Transport Manager STATUS Exit Return Codes

Value	Exit Type
00000000	ACCEPT completed
00000001	ALLOCATE completed
00000002	Conversation deallocated
00000003	Allocation request
00000004	Transport manager address space gone
00000005	VTAM gone
00000006	QUERY reply
00000007	IDENTIFY completed

Reason Code	Function and Description
0	Good completion of ALLOC, ACCEPT, DEALLOCATE, IDENTIFY function
1	GETMAIN failed
2	GETMAIN VTAM CNOS failure
3	Exceed session limits or token capacity
4	VTAM ALLOC failure
5	Buffer shortage
6	Multi-abend during SEND

7	VTAM SEND failure
8	Abend during RECEIVE
9	DEALLOCATE normal received
10	DEALLOCATE abnormal
11	VTAM RECEIVE failure
12	Logic error: unable to find LUM for conversation
13	User error: invalid length on MF(R) SEND
14	IDENTIFY failed (SETLOGON failed)
15	ALLOCATE failed, name not found
16	ALLOCATE failed, timeout expired
17	ALLOCATE failed, `DEALLOCATE` issued at other end
18	ALLOCATE failed due to TMS termination failure
19	Conversation deallocated due to `VTAM GONE` state

Appendix H. CQS Control List Entries

A list entry is a z/OS term for a piece of data on a coupling facility list structure list. A control list entry is a list entry that CQS writes to the control list header (list header number = 0). CQS uses control list entries to manage the list structure, such as managing structure checkpoint, structure recovery, and overflow.

The following list describes the CQS control list entries:

CQSGLOBAL (global list entry)

- Contains the global information for connecting to the structure.
- Created by the CQS that allocates the structure.

CQSGLOBALCONN (global client connect entry)

- Contains the client connect information that pertains to all clients.

CQSLOCAL (local list entry)

- Contains CQS local information, such as log token of the last system checkpoint.
- One CQSLOCAL exists for each CQS connected to the structure.

CQSSTRCHKPT (structure checkpoint list entry)

- Contains log token and time stamp of the last two structure checkpoints.

CQSSTRCHKPTINPRG (structure checkpoint in progress list entry)

- Indicates that structure checkpoint is in progress.

CQSLOGFULL (log full processing list entry)

- Contains information about log-full processing that is in progress.

CQSOVERFLOW (overflow list entry)

- Indicates whether a structure is in overflow mode.
- Might indicate that the structure is in the overflow threshold processing mode.

CWSOVERFLOWQNAME (overflow queue name list entry)

- Contains a list of queue names in overflow mode.

CQSOVERFLOWQNMA (overflow queue name adds list entry)

- Contains the names of queues that have been added to overflow during the current threshold process.

CQSOVERFLOWQNMR (overflow queue names removed list entry)

- Contains the names of queues that have been added to overflow during the current threshold process.

CQSRECOVER (recover list entry)

- Indicates that structure copy or recovery is in progress.

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